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How can it be that the very thing that defines us as a profession has seemingly become optional?

Beyond its regulatory purpose, licensure marks the conclusion of an architecture graduate's formal education. It signifies preparation to embark upon "practice," that lifelong journey to gain experience that never ends. Licensure has nothing to do with sealing drawings; it's about becoming professionally "whole."

In recent years, the process of becoming licensed has dramatically improved, and resources are more abundant than ever. In addition to broadened IDP reporting and the ability to take the ARE upon graduation, AIA Chicago, working with its content partner Black Spectacles, has supplemented its in-person ARE Review with 40 hours of online material, accessible from anywhere at any time.

Nonetheless, fewer graduates are pursuing licensure, and those who do are taking longer than ever.

The search for an explanation often focuses on the emerging professionals themselves, but it might be more productive for the established profession to examine its own declining expectations of licensure. The profession is still dominated by architects who ran the gauntlet of five years of school, three years of internship and the four-day exam offered once a year.

Since then, our profession has made great strides in supporting emerging professionals and recognizing their contributions. Their voices are now heard on boards and committees at all levels of AIA, and their talent and accomplishments are profiled regularly in our professional publications and forums. Yet undermining these advancements, the established profession has seemingly stood by and watched as licensure has declined.

In our schools, we need to counterbalance the message of influential (and unlicensed) academics who dismiss it. Within the profession, we need to offset the advice of award-winning practitioners like Jonathan Segal, FAIA, who counsel against licensure to avoid liability. Within our offices, we need to promote licensure and structure incentives that reward it. And personally, each of us should use every encounter with an emerging professional to advise, encourage and, when necessary, nag and cajole them forward on the licensure path.

We need to restore the culture of licensure. Reach out to a promising young professional and make them an offer they can't refuse: pay for each exam they pass in exchange for a promise that they will do the same for someone once they are professionally established and financially secure.

Scott A. Rappe, AIA
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Since 1951, Mies van der Rohe’s Farnsworth House has existed as an iconic example of minimalist design in a natural setting. The single-family residence built along the Fox River in Plano, Ill., has forged a relationship with the ever-changing natural landscape and welcomes visitors to tour it both inside and out.

Now, a local art collaborative is offering the public a chance to re-experience the Farnsworth House.

Luftwerk is an artistic partnership between Petra Bachmaier and Sean Gallero, both artists by trade. The duo uses light, video and audio projections to create site-specific installations that highlight unique features of their subjects. Their work has been exhibited in a number of public and gallery spaces, including Millennium Park, JFK International Airport and the Massachusetts Museum of Contemporary Art.

In 2010, Luftwerk completed a multi-channel video, light and audio installation, titled “Projecting Modern,” at the Robie House in Hyde Park. They then were approached by the Western Pennsylvania Conservancy to illuminate Fallingwater for the home’s 75th anniversary.

“It was an incredible opportunity to really be with Fallingwater and celebrate the house and experience the dynamics you can add to an architectural structure through light,” Bachmaier says. “We created a new dialogue between modern architecture and contemporary art. We really wanted to continue this dialogue with architecture and sought out Farnsworth House specifically.”

Their new project is titled INsite, which Bachmaier says references not only the site specificity of the home, but also the effect the reflections have on the interior of the space.

“Once you illuminate the Farnsworth it becomes almost like a magic lantern; it reflects upon itself,” she says. “It’s very specific to the architecture of Mies and how the glass wall functions as a transparency screen. It lets light through, so we thought once you’re inside the Farnsworth House you’re in a place of light.”

The team initiated a test run of INsite in April 2012 to examine how the house would respond to the light and video projections. Farnsworth House leadership changed hands in 2013, but Bachmaier says Farnsworth House staff has supported the installation from the start.

The project arrives at a critical time for the house, as river levels continue to threaten the integrity of the structure. INsite uses the home’s natural setting and highlights its relationship with its surroundings.

“We were very interested in the architecture placed in nature,” Bachmaier says. “We also wanted to celebrate the kind of architecture that shows a harmonious balance between man-made structure and a natural organic setting.”

Luftwerk’s portfolio dates back to 2000, but the Farnsworth House project is the first of the team’s to use crowdfunding as its source of revenue. Bachmaier says the Kickstarter campaign, which ended May 31, 2014, and raised more than $26,000, was an ultimately successful attempt to win support for the project outside the architecture community.

“We went to Kickstarter because we were interested in gaining public support,” she
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says. "We were really interested in how the community itself would respond to the project while also becoming part of it."

The installation will run from Oct. 16 to 20, with buses departing from downtown Chicago at sunset. Guests will be treated to a concert from Owen Clayton Condon, who also composed the score that plays during the projections. Refreshments will be served, and as guests settle into the site, the projections will take over.

Ten video projectors positioned around the house will communicate with each other to produce a cohesive video that envelops the structure. The combination of light and video will highlight individual aspects of the house, from the walls to the windows to the curtains, working with each specific texture of the home. Guests will be free to walk in and out of the house as the projections play.

"It's a beautiful experience from the exterior. It really highlights the architectural features," Bachmaier says. "Once you go inside the house, there is light traveling through the glass walls and you get a lot of reflections in the interior architecture, which is kind of a beautiful surprise. It sets apart the exterior from the interior because both of them are completely different experiences."

Bachmaier hopes INsite will generate interest in the Farnsworth House for the community in Plano and beyond, attracting curious visitors outside the architecture community.

"By re-inviting the public to rediscover these historic places, we become more aware that we have to protect them," she says. "I just hope people get very excited about the Farnsworth House and about preserving modern architecture in general. As a contemporary artist I'm inspired by what other people have done in the past. I'm hoping INsite will build a dialogue between a historical context and contemporary art, so hopefully there will be more projects like this in the future." > Amy McIntosh

Living Amphitheater Grows

RAGDALE DESIGN COMPETITION PRODUCES PERFORMANCE SPACE FROM HAY WATTLES

The second year of the Ragdale Ring Project competition has produced a living amphitheater on the artist residency program's historic property in Lake Forest.

The competition accepts entries each year to recreate the outdoor performance space for showcases during the summer and fall.

This year's winning design from Michael Loverich and Antonio Torres of the Bittertang Farm takes its cue from the surrounding landscape and the original Ragdale Ring designed by AIA Gold Medalist Howard Van Doren Shaw in 1912.

The 2014 ring combines natural materials such as hay wattles and vines to create an inventive, organic structure meant to look as though it grew from the earth.

"We knew from the beginning we wanted to play with material that was associated with the grounds, so we thought this would be a great opportunity to explore hay and wattles further," Loverich says. "The hay over time will decompose, but it's also a perfect medium for growing plants."

Vertical trusses take on most of the load from the wattles, but it's the hay component that makes the structure truly unique.

Guests will be allowed to walk in and out of the Farnsworth House during the light and video projections, creating a unique experience for each visitor.
When The Design Büro wanted to create a technologically advanced laboratory with passive ventilation, they relied on Vectorworks software to move their ideas from concept to completion.

Project name: Bristol Pathology Services  Architect: The Design Büro (Coventry) Ltd.  Client: North Bristol Hospitals NHS Trust

www.vectorworks.net/chicago
Wattles are essentially tubes filled with hay typically used for erosion control applications and at construction sites when they’re trying to retain soil,” Torres says. “We are interested in grabbing materials not typically used in architecture and getting playful with them.”

The wattles used in this project are light and malleable, making them easy to work with. They also provide the living component of the design.

“We didn’t want this to be built so if you came on the first day and on the last day, it would be exactly the same,” Loverich says. The biggest change in appearance will come from plants growing on and in the structure. The exterior of the space features native prairie plants and grasses, while the interior plays with color by using plants such as sweet potato vines with dark purple leaves.

Some of the plants also have a sound component as they rustle in the wind. With a little water and a mild summer, the plants should flourish, but no one knows exactly what the space will look like.

“We’re really interested in seeing how it takes on a life of its own and how many plants actually take and how many don’t make it,” Torres says. “There’s not many competitions that would take a chance with a project like this.”

Originally, LED lighting was to span through the hay, but the designers soon realized uplighting was the best solution.

“With the stage there’s a central, opaque portion and then on the perimeter the wood planks are about 3/4 of an inch apart, so underneath that whole area are rope LEDs,” Loverich says. “It allows the stage to glow, provides uplighting for the hay wattles and really brings out the texture.”

The texture spans from the highest point at 20 feet down through the arms on the ground that provide a space for people to watch the performances. These arms create what Loverich calls a “deformed circle,” another acknowledgement of Van Doren Shaw’s original, circular ring.

“We wanted to work with a team that was looking to experiment and learn something and grow from that experiment,” says Jeffrey Meeuwsen, executive director of the Ragdale Foundation. “This project is both very contemporary but also oddly natural in this setting.”

The design team was awarded a $15,000 grant for construction and took advantage of a three-week residency at Ragdale for 10 people, who spent five days a week helping fabricate the space.

Loverich currently teaches at the University of Pennsylvania while Torres teaches at private institutions in Mexico, so both were able to bring some of their architecture students to Ragdale as part of the 10-person team for the project.

“It was a diverse team, but they were all enthusiastic about being part of this giant experiment and amazed by the facility and resources Ragdale has to offer,” Torres says.

“This made for an amazing and relaxed time to put this together in a cohesive way.”

With a tight-knit team, Torres says they avoided any major challenges, and when issues came up, they could deal with them quickly. Sustainability was important to the team, with this ring repurposing approximately 95 percent of the components of last year’s ring. Once this year’s structure is removed, many of the materials will be recycled, and Torres hopes the 2015 design can utilize the other pieces.

This cycle is all part of what Ragdale stands for: Bringing together the historic and architectural history of the property with public programs and residency for creative professionals. > Abby Kleckler
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Tipping the Scales
AIA 2030 COMMITMENT ENTERS FIFTH YEAR WITH CHALLENGES

The 2030 Commitment marks AIA's entry into the age of hyper-awareness for the need among governments, corporations and individuals to "go green." At its core, it is a movement to establish standardized metrics and reporting for the energy performance of buildings.

Under the terms of the Commitment, firms must:
- Implement a minimum of four operational actions for reducing environmental impact within six months of signing; and
- Develop a long-range sustainability action plan for achieving carbon neutrality within one year of signing.

Bill Sturm, AIA, LEED AP, principal at Serena Sturm Architects—and the 2014 chair of the AIA National Committee on the Environment (COTE)—summarizes the Commitment's goals neatly: "It's an effort to get a firm's complete body of work channeled toward carbon-neutral design."

Sturm, who has long been an environmental advocate, says he first got involved with the initiative after being approached by Rand Ekman, AIA, and CannonDesign. Sturm and SSA jumped right in, hosting an informational session on the AIA 2030 Commitment that first year. The firm went on to participate in a national AIA case study in 2012, and has continued to advocate and recruit for the cause.

Rallying the Troops
On the whole, though, getting firms to join on to the 2030 Commitment has proven more challenging than expected—at least in some circles.

"We're getting a huge response from the larger, more established firms but we're getting less of a response from the smaller firms," says Bill Leddy, FAIA, LEED AP, principal of Leddy Maytum Stacy Architects in San Francisco. Leddy is also part of COTE, having served as the chair last year and remaining on the roster for the advisory committee in 2014.

Even though the trend has been identified, Sturm, Leddy and the rest of the 10-member COTE are still trying to figure out where the disconnect is coming from, and what can and should be done about it.

From what Sturm has gathered, it appears that architects are most concerned about an increase in workload if they start reporting on all of their projects. At the same time, he believes many are still unclear about the benefits they and their firms can derive from diving into the Commitment with both feet.

"There's definitely a tension between getting a lot of firms onboard and making sure the activity isn't too onerous for them," he says.

Looking for Inspiration
With some of these factors in mind, Sturm, Leddy and the rest of COTE are "working to promote the 2030 Commitment as a central program of AIA," according to Leddy. The key is making architects understand why they should become part of the movement.

Architects should be particularly motivated, says Leddy, by the shift in building codes across the country toward stricter energy efficiency requirements. As an example, he cites new regulations in California that will require all new residential projects to be net zero energy (NZE) by 2020; new commercial projects must meet the NZE requirement by 2030. With the writing seemingly on the wall, says Leddy, it's better for the architecture community to voluntarily get with the program now and stay ahead of the curve.

"We're preparing the community for the new realities of architecture in the 21st century," he says. "And it just makes good business sense."

COTE is starting to see dividends from some of its efforts. In 2013, the committee incorporated the principles of the 2030 Commitment into judging for its annual Top 10 Green Projects Awards, and the winners received major national attention.

"It feels like we're at a tipping point," Leddy says.

The hope, ultimately, is that the majority of the architecture community will eventually come on board with carbon neutrality, so that in the future efforts can turn to other facets of sustainability.

Sturm compares it to getting children to eat their vegetables.

"If you can get them to just eat one vegetable for a while, and they don't walk away from the table, potentially you can introduce new vegetables," he says. "So carbon neutrality is the first, but then there's issues of energy usage, water and even materials, and we're trying to ease them into the process."
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AIA Chicago Launches New Website

AIA Chicago’s brief history of the Internet:
1945 — Vannevar Bush publishes landmark article, “As We May Think,” in The Atlantic, positing the use of wartime technology for peaceful purposes, presaging modern Internet.
1972 — Email invented.
1983 — Apple introduces Macintosh HE.
1996 — AIAChicago.org goes online.
2005 — YouTube.com premieres.
2014 — A new AIAChicago.org launches!
Launched to coincide with the start of the 2014 AIA National Convention, AIA Chicago unveiled its first new website design since 1996. The site features an archive of Chicago Architect issues, a custom-built Architect Finder for local member firms to showcase their portfolios, a revamped calendar and job board, and a new streamlined design and aesthetic.
Check it out now at aiachicago.org.

Lawrence O’Donnell, 1929-2014

Lawrence “Larry” O’Donnell, founding partner of architectural firm OWP/P, passed away this June at the age of 85. O’Donnell, a member of the AIA College of Fellows, was a founding partner of OWP/P, which was acquired by CannonDesign in 2009. OWP/P specialized in school, hospital and public building design.
O’Donnell’s work continues to influence members of AIA Chicago and the greater architectural community.

John Vinci, FAIA, to Receive AIA Chicago’s 2014 Lifetime Achievement Award at 59th Annual DesigNight

Few architects honor the past and envision the future as clearly as John Vinci, FAIA, who will be honored with the AIA Chicago Lifetime Achievement Award at DesigNight on Friday, Oct. 24. The 59th annual awards night will also honor the year’s best in Chicago architecture and the worldwide work of Chicago-area firms. Last year, 35 awards across four categories were presented at an event attended by nearly 1,000 people at the Grand Ballroom at Navy Pier.
Vinci, 77, has been practicing architecture since he graduated from the Illinois Institute of Technology (IIT) in 1960. A collaborator with famed architectural photographer Richard Nickel, Vinci is known for his staunch, outspoken defense of classic Chicago architecture over the past 50 years. From his initial preservation work as a student—organizing an IIT exhibition on the work of Adler & Sullivan, or salvaging ornamentation from the then-soon-to-be demolished Garrick Theater—he has played an integral part in the preservation and restoration of works from architects as varied as Frank Lloyd Wright to modernists Ed Barnes, Mies van der Rohe and Eero Saarinen. Among his numerous restoration projects, Vinci was instrumental in the salvation and reconstruction of Louis Sullivan’s Chicago Stock Exchange Trading Room.
“John is both a consummate designer and lifelong advocate and practitioner of preserving Chicago’s historic architecture,” Bonnie McDonald, president of Landmarks Illinois, says. “Because of his leadership and perseverance, some of Sullivan’s and Wright’s greatest works have been restored for generations to enjoy. And his dedication to the legacy of Adler & Sullivan, especially as documented by the late Chicago photographer Richard Nickel, resulted in The Complete Architecture of Adler & Sullivan, a book that will continue to motivate all of us to preserve Chicago’s great architecture.”
Equally adept at developing a vision for new spaces, Vinci is well known for his art exhibit installations at the Art Institute of Chicago and other museums and galleries. Vinci’s architectural portfolio includes the National Italian American Sports Hall of Fame and the Arts Club of Chicago and numerous award-winning residences.
“No one has moved so effortlessly from past to present to future as John Vinci,” says Zurich Esposito, AIA Chicago executive vice president. “His designs are rooted in history and informed by his scholarship, yet are not certain of our time.”
Vinci, who began his career at Skidmore Owings and Merrill and worked in the office of architect Crombie Taylor and firm Brenn Danforth Rockwell, has led Vinci|Hamp Architects Inc. since 1995, along with Philip Hamp, FAIA. He has served as a professor at Roosevelt University and IIT, published numerous articles on architectural issues and maintains an active role in Chicago’s visual arts community. Vinci was elected to the AIA College of Fellows in 1990.
Last year’s winner of the AIA Chicago Lifetime Achievement Award was Stanley Tigerman of Tigerman McCurry Architects. Past winners include Helmut Jahn, Ben Weese, Walter Netsch, John Holabird Jr., Gertude Kerbis, Natalie de Blois and, jointly, Daniel Burnham and Edward Bennett.
Vinci will receive the Lifetime Achievement Award Friday, Oct. 24, at DesigNight, which will be held at the Grand Ballroom at Navy Pier. CA
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The first multi-residential transit-oriented development (TOD) under the amended Chicago zoning ordinance, designed by Brininstool + Lynch, began construction recently. The building at 1515-17 Haddon St. will contain 40 apartments, as well as a 3,600-square-foot penthouse, 2,500 square feet of commercial space and 21 residential-only parking spots.

Cordogan Clark & Associates Architects won a limited invited competition for a new mixed-use complex in Wuxi, China. The hotel, condominium and retail project aims to employ key elements of traditional Chinese architecture with contemporary sustainable design and functional efficiency. Vertical screen elements will be used to recreate the effect of reflection often found in Wuxi’s traditional architecture, located along the rivers and lakes of the city.

Atul Karkhanis Architects is designing an adaptive reuse project for the not-for-profit organization Asian Human Services in the West Ridge neighborhood on the far North Side. The 10,700-square-foot two-story building will house the Literacy Education for Adults and Families (LEAF) program, providing a gathering space for the community and a much-needed day care facility. It is scheduled to open in spring 2015.

BOX Studios completed a reimagining of stock photography agency Getty Images’ downtown call center and marketing office. The new design concept revolves around a black and white color palette that allows emphasis on the company’s photo collections. Spaces include an open beverage bar, meeting rooms, open workstations and a reception area.
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Skidmore, Owings & Merrill received the President's "E" Award for Exports at a ceremony in Washington, D.C., this past May. Presented by U.S. Secretary of Commerce Penny Pritzker, the award is the highest recognition a U.S. entity can receive for a significant contribution to the expansion of U.S. exports. The firm was recognized for the export of its design services; since 2009, more than 50 percent of SOM's service fees have been derived from exported services, said Gene Schnair, FAIA, managing partner.

Robert Benson joined CannonDesign's corporate/commercial practice as senior vice president and design leader. He was previously an associate principal at 4240 Architecture.

Jay Johnson, AIA, was promoted to principal at Legat Architects. He will continue to serve as senior project manager and as director of the firm's Oak Brook studio. Johnson has been with Legat for 21 years.

Demonica Kemper Architects recently completed the North Extension Center (pictured above) for Kankakee Community College in Bradley, Ill. The 18,000-square-foot building, part of the college's new satellite location in downtown Bradley, is the first LEED Gold project built in Kankakee County.

In other news, the firm's Health Careers Center project for Black Hawk College broke ground in Moline, Ill. Scheduled for completion in fall 2015, the building is also targeting LEED Gold certification.

Wiel Arets Architects, together with Italian utensil design company Alessi, has launched a cutlery set, 'Eat it,' for Alessi's spring/summer 2014 collection. The set was crafted over a period of six years.

The Chicago office of HOK recently won the 2014 School Annex Design competition, organized by the Living Building Challenge Collaborative: Chicago (LBCCC). The task was to design a sustainable classroom building annexing the Eli Whitney Elementary School on the Southwest Side. HOK's winning concept features a "living" facade that changes shape based on temperature.

The inaugural Chicago Architecture Biennial is slated for fall 2015. Announced earlier this year by Mayor Rahm Emanuel, the Chicago Architecture Biennial will be an international forum on architecture and the built environment. It will be presented in partnership with the City of Chicago and the Graham Foundation. AIA Chicago will be a supporting partner for the event.
Ross Barney Architects completed work on the new Office, Technical and Education (OTE) Building for the Illinois Accelerator Research Center at the Fermi National Accelerator Laboratory. This 47,000-square-foot project, located outside of Batavia, was designed for LEED Gold certification. The space serves as an incubator for private companies working on research with Fermilab scientists and features a 175-seat lecture hall, high bay laboratories and adaptable offices.

The School of the Art Institute of Chicago appointed Jonathan Solomon, AIA, to director of the Department of Architecture, Interior Architecture and Designed Objects. He previously served as associate professor and associate dean at Syracuse University.

Caterina Hutchinson joined tvsdesign as an associate, interior designer.

Tom Boeman of Boeman Design has developed an app that is designed to make working with imperial and metric dimensions easier, such as computing groups of disparate units of measurement. ArchiCalc was launched earlier this year and is available on the iTunes App Store for $3.99.
Saving Farnsworth

THE NATIONAL TRUST FOR HISTORIC PRESERVATION FLOATS A PLAN TO TAMPP DOWN THE FLOODING THREAT AT MIES’ LANDMARK

By Gunny Harboe, FAIA

Creative design thinking is often required to preserve endangered historic places. The National Trust for Historic Preservation is taking this approach to save the Farnsworth House in Plano, Ill., from the rising Fox River that threatens Mies van de Rohe’s historic masterpiece. This is a precedent-setting moment in preservation, where responding to an environmental threat in a new and creative way can provide a response model for the anticipated threats facing buildings worldwide from climate change in the future.

The pattern of more frequent flooding at the Farnsworth House cannot be ignored. Each flood destroys the fabric of the building. Flood waters have reached above the floor at least once every 15 years on average, and hydrology studies confirmed the incidence of flooding will increase.

The National Trust for Historic Preservation and Landmarks Illinois purchased Farnsworth House at auction in 2003 because the most serious bidder wanted to relocate the building. The two partners recognized the value of keeping the building within its natural landscape. More than a decade later, the rising levels of the Fox River have forced them to begin a similar conversation. That is, unless a mechanical solution is adopted that allows Mies’ masterpiece to remain on the site, in the original location except during flood events when the building is elevated above the rising waters.

In November 2013, I became involved when the National Trust for Historic Preservation convened the Technical Advisory Panel to provide guidance in selecting a course of action. We analyzed nine options overall, and three options emerged as the most plausible solutions: filling the site and raising the house in situ; relocating the building on the site; or hydraulically lifting the building out of harm’s way for the duration of a flooding event. As a preservation architect, my inclination was to do the least amount of intervention possible to protect the resource. Therefore at the outset, the mechanical solutions (a hydraulic lift or a hybrid buoyancy system) seemed overly invasive to me. This high-tech solution felt at odds with the simplicity and directness of the house.

After the study was completed by Robert Silman and Associates, our panel evaluated the proposals through the lens that the landscape is integral to the aesthetic conception of the Farnsworth House. Much of the beauty and drama of the house derives from its close proximity to the river. Raising the house in situ would require adding more than seven feet of fill to barely get above the 500-year flood line. This translates to 93,000 cubic yards of fill, thereby killing dozens of mature trees and destroying the Edith Farnsworth and Peter Palumbo landscapes.

The hydraulic solution would be completely hidden below grade so the visitor would not be aware the building was modified. All three approaches require the alteration of the foundations below grade and the temporary removal of the building from the existing location. During this temporary move, the building would be restored.

Contrary to my original thoughts, our panel and other outside peer reviewers believed the ‘hidden approach’ would be the most sensitive, assuming the hydraulic system was dependable. Hydraulics are commonly utilized in high-stress, difficult situations, such as with dams, bridges, military equipment and even aircraft landing gear. The technology is proven and readily available. The system designed for Farnsworth employs these regular off-the-shelf parts—in use in these other industries—but they are applied in an unusual way: to lift a building. The system will have no single-point failures, which means every connection has double and triple redundancies to prevent failure.

Preservationists are not often considered radical technologists. Yet, the Technical Advisory Panel’s thoughtful and thorough consideration of the different approaches shows the radical mechanical solution is the most sensitive, compelling and eloquent. It will keep the Farnsworth House in its original setting, surrounded by nature, while protecting it from the ravages of the Fox River. This is an opportunity to protect a building and to try a vetted, innovative solution that will be a benchmark for the preservation and architecture community.
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Photos: Mercer Court, University of Washington, Ankrom Moisan Architects, courtesy WG Clark Construction
Arena Stage at the Mead Center for American Theater, Nic Lehoux, courtesy of Bing Thom Architects
The issues caused by the unpredictable and chronic flooding of the iconic Farnsworth House in Plano, Ill., are in desperate need of attention. Yet the recent efforts and proposed solutions offered by the National Trust for Historic Preservation, while well-meaning, seem to be composed of 25 percent theater and 75 percent misguided advice from a group of yes-sayers.

The National Trust plan, which proposes temporarily moving the home to build a pit beneath its original site and then using a mechanical contraption to lift the house out of the floodplain when threatened, portends serious consequences.

First and foremost, the idea of separating the house from its foundations is against the very nature of its architectural integrity. Moving the house to higher ground at the time of the pit’s construction and then returning the home to its platform above the pit for a hydraulic system is a costly and unnecessary step that endangers the rigidity of the steel frame and what’s left of the original glass. (And this is assuming that the glass could be removed intact and reinstalled.) Further, dissecting the porch from the house complicates the simplicity of its conception, and will require finding a means of support to secure the porch as it’s left behind in an approaching flood.

Other complications will occur
At a town hall meeting in Mies’ Crown Hall building on May 29 the National Trust stated the equipment to be installed at Farnsworth would have a 75-year life span. In the event of a flood, no matter how minor or major, the pit underneath the house would need to be cleaned of debris afterward, requiring the services of a cleaning company. When compounding these expenses over the course of 75 years (and beyond) the expenditures are exorbitant, especially in light of the increasingly constrained finances dedicated to preservation.

One of the most revered professors at IIT, Arthur Takeuchi, who studied and worked with Mies, said it best when confronted with the plan. “This is an inelegant solution. It will destroy its architecture,” Takeuchi said at the May 29 meeting. “Why don’t you simply raise the house the minimum necessary to protect it from the waters and leave it at that?”

Passive solutions are far more sensible. Two immediately come to mind: Considering the floor of the house is already five feet above the floodplain, raising the house approximately four feet at its present site as Takeuchi suggested would keep it out of harm’s way. From my calculations, there is about 1,700 feet between the point of arrival and the Farnsworth House, resulting in less than a 1 percent slope. Although the riverside would
need some terracing, this is a conservative and sensible solution.

Another more intriguing solution would involve moving the home to an alternate site on the grounds. This would not only address the issue of flooding, but also resolve the conflict of the present site since it was disturbed by the construction of the highway in the 1960s. The highway built then brought a vehicular traffic thoroughfare 200 feet closer to the house, upsetting its serenity. By moving the house to a meadow slightly to the north and east of the present site—and farther from the highway—it places the home about the same distance away from where the original road was located. Though this proposed site may be on the same flood plain as the house is presently, this location would allow for more distance on all sides to gradually taper a newly constructed berm and achieve a far more rewarding, maintenance-free and permanent solution.

Although one can never second-guess the mind of a great architect, the fact is, if Mies knew the flood plain waters were to rise higher (not to mention the construction of the highway in the 1960s), he would have placed the house elsewhere on the property on higher ground. His architecture was predicated on solutions that were rational and seemingly simplistic. Why are we compounding the issue with the National Trust’s “Jackin’ the Box” solution? CA

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It has often been said that the best way to create sustainable architecture is through integrative design, a process that brings together all members of the building team to work collaboratively from start to finish. So an audience poll at a recent sustainability seminar at the AIA National Convention in June had somewhat surprising results: only about half of those present said they'd been part of such a process.

When presenter Helen J. Kessler, FAIA, LEED Fellow, principal and founder of HJKessler Associates, asked the participants if they had found it difficult, most of the hands stayed in the air. Kessler’s mission, at the seminar and throughout her career, is to turn around both the perceptions and the realities of integrative design.

The seminar’s ambitious title was “Changing Mindset and Creating Extraordinary Results Through an Integrative Design Process.” It focused on a case study of Sarah E. Goode STEM Academy, a LEED Platinum-rated high school in Chicago. The presenting team included the key players: client, architect, engineer and sustainability consultant.

The client was the Public Building Commission of Chicago (PBC), represented by sustainability manager Deeta Bernstein, LEED AP BD+C. Jennifer Costanzo, AIA, LEED AP is a principal at architecture firm STR Partners, and Sachin Anand, PE, LEED AP BD+C, is a principal at engineering firm dbHMS. Coordinating the presenting team and emceeing the seminar was Kessler, who served as the sustainability consultant on the project.

Kessler began by explaining the key concepts of integrative design. She stressed the importance of creating a whole-systems process that replaces the traditional linear mode of thinking. The goal of every initial team charrette is not to produce a random list of cool technologies but to explore overall sustainability strategies.

Kessler engaged the audience in a mini-charrette that mimicked those she does at the beginning of each project. The two questions she always begins with are, “What would have you be able to say the project is sustainable?” and “What would make the project a success?”

In a real-world client charrette, Kessler elicits ideas from all project team participants, and then the question that consumes most of the meeting is “How do we get there?” Only after extensive discussion is the final question posed: “Based on the foregoing, what LEED level will the project achieve?” She feels that it is important to determine LEED points at the end rather than the beginning, to avoid the laundry-list mentality that can be at odds with the whole-systems approach.

At the convention seminar, Kessler and the presentation team discussed the audience’s responses and explained the details of the Goode project. One major constraint was that the team had to work from a Chicago Public Schools Urban Model High School prototype. The concept transfer package dictated both site plan and floor plan. “I thought that since we were working from a
The cistern at Sarah E. Goode STEM Academy was designed by Colby Lewis, AIA, LEED AP, of STR Partners. Its sculptural form calls attention to its function of harvesting rainwater for the community garden.

Photo by Steve Hall/Hechinger Blessing
prototype, the charrette would be a waste of time,” said Costanzo. “But then the owner actually suggested meaningful changes.”

The changes were significant enough to take the building to Platinum-level sustainability from the Gold level of the prototype, while reducing overall costs. Increasing the glazing area from 28 percent to 41 percent allowed more daylight into the classrooms. Anand explained that his firm did extensive energy modeling to determine the optimal balance between daylighting and increased heat loads. “I could run spreadsheets all day, but you have to distill the data to understandable numbers,” he said.

A key innovation was creating a ground source heat pump system. Its higher costs were offset by several savings: Because there are heat pumps located in each classroom, the duct system could be much smaller, and the overall height of the building could be reduced slightly. The mechanical penthouse was eliminated, leaving room on the roof for an array of solar panels—a double bonus. The panels heat the water for the indoor pool.

Community input resulted in special features at Goode, which is located at 77th Street and Homan Avenue. Neighbors wanted a community garden, which landscape architecture firm Jacobs/Ryan was happy to incorporate. Rainwater is harvested in a cistern that STR designed to look like an intriguing sculpture.

Kessler's experience with prototypes for the PBC includes three public libraries designed by Lohan Anderson that will serve as models for branches throughout the city. The newest and largest of these is the Edgewater Branch library. The two-story, 16,000-square-foot building replaced a 1970s facility, and it occupies a prominent—and transit-friendly—site at 6000 N. Broadway. Originally targeted for LEED Silver certification, it has been certified Gold.

As usual, Kessler was involved from the beginning, and she started by leading the entire project team in a charrette. She encourages everyone to look at the big picture and to set general goals. These sessions usually last three to four hours, “so we can really dive into what the opportunities are,” she said. Her skills in drawing information from each participant are as important as her technical knowledge. “Helen has so much experience,” said Ryan.
The Chicago Public Library's Edgewater Branch, designed by Lohan Anderson, has been certified LEED Gold.
The rehabilitation of Loder Hall at Garrett-Evangelical Theological Seminary earned LEED Gold certification as well as a design award from the City of Evanston.

Cusick, AIA. “She can run the meetings to push everyone to achieve more.”

The Edgewater library, like the two other prototypes, uses a ground source heat pump system for heating and cooling. It has a partially vegetated roof with a broad overhang that shelters the walls from the summer sun. The tight building envelope and radiant heating in the floors maximize energy efficiency. Permeable pavers in the parking lot mitigate stormwater runoff.

Not all Kessler’s projects involve new construction. One recent challenge was the rehabilitation of Loder Hall at Garrett-Evangelical Theological Seminary on Northwestern University’s Evanston campus. Designed by Holabird & Root in 1959 in an era of cheap energy, the dormitory needed to be updated and transformed into a multi-function building that includes a residence hall.

As with the PBC, the client has a strong commitment to sustainability. Garrett-Evangelical is a member of the Green Seminary Initiative as well as the Seminary Stewardship Alliance. The school even offers a class on Environmental Theory, Theology and Practice. So it was no surprise that they wanted a building that would implement their philosophy. “It was a great experience,” says Anne McGuire, AIA, of McGuire Igleski & Associates, who led the renovation project. “Helen likes to get everyone on board, and the seminary does everything by consensus.”

A geothermal field was a popular idea. Located under a parking lot, the wells will eventually supply heating and cooling to other buildings on the Seminary’s small campus. The building envelope also needed substantial improvement. Walls and roof received additional insulation, and the parapet was made higher to accommodate it. All windows were replaced. The roofs gained reflective coating, with the one over the single-story cafeteria planted with vegetation in strips that lie over the existing joists.

In 2012 the project was certified LEED Gold and won an Evanston Preservation and Design Award for Sensitive Adaptive Reuse. These results provide further evidence of the value of integrative design—a process that is at the core of Kessler’s practice. CA

Kessler will give three presentations at the upcoming BUILDINGChicago/Greening the Heartland conference on Sept. 29-Oct. 1: the Sarah Goode case study described in this article; a presentation on Loder Hall; and “Materials Credits for LEED Version 4.”
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THE PASSIVE-IST FRONT
HOME BUILDING TECHNOLOGY THAT LIGHTENS ENERGY USE EXPANDS ITS REACH

By Dennis Rodkin

Tom Bassett-Dilley, AIA, and Katrin Klingenberg are the most passive aggressive people in Chicago architecture.

Bassett-Dilley is the architect of the metropolitan area's first fully passive home, a 3,800-square-footer in River Forest. Its super-efficient resource use and handsome updated-traditional looks have made it a minor celebrity. Bassett-Dilley now has at least three more passive homes in the works, in Oak Park, Geneva and Downers Grove.

Klingenberg, a German import who designed her own home and a few others in Urbana, Ill., in the passive model, is a founder and the executive director of the Chicago-based Passive House Institute US (PHIUS). An advocacy and standards-setting group, PHIUS' ninth annual conference in San Francisco on Sept. 10-14 is expected to attract as many as 500 participants this year. The 2015 conference will be held in Chicago.

Between them, the two are making a yeoman effort to move resource-sipping homes and other buildings into the mainstream. The projects they support are what Bassett-Dilley calls "homes that their owners can believe in. They contribute to a global energy solution."

"The paradigm of passive building is a different way of thinking about your thermal enclosure, ventilation and building enclosure," Bassett-Dilley said. Those aspects are among the first considerations during modeling of a future project, he says, as opposed to having the architect start with a strict focus on function and aesthetics, "and then handing it off to the contractors to size the systems that will go in it."

He acknowledges he's over-simplifying his description of the alternate way of doing things to make the point that the passive house conception is one that flip-flops the design priorities. "We're trying to avoid needing a giant machine to energize our designs," he said.

For her part, Klingenberg notes that even with recent "exponential growth" in interest from all corners of the architecture, building and construction-supply realms, "we are still a very small market." Since PHIUS started certifying in 2008, about 700 people have completed the process, she said, and as many as 1,000 more have gone through training without becoming certified—either because they didn't take the final exam or because they didn't pass it.

PHIUS also certifies projects and recently started verification of products. Klingenberg said about 100 projects have been certified and another 100-plus are pre-certified, pending completion of construction. In all, they contain more than 400 residential units, and span the nation from New York to Oregon.

One notable project is the 2013 conversion of a historical YMCA building in McKeesport, Penn., near Pittsburgh, a four-story masonry building that got a thorough passive-style retrofit as it was being converted into 75 small rental units for low-income tenants. The building's annual combined energy bill reportedly dropped from about $65,000 a year to somewhere in the $20,000-to-$25,000 range.

It's the possibility of savings on that scale that has made multifamily projects the biggest growth category for PHIUS, Klingenberg said. Although few Chicago developers and architects have shown interest in using the passive house model,
according to Klingenberg, several have gone other energy-reducing routes.

"It's interesting that we haven't seen more interest from Chicago yet," she said. "It might be because so much of [the architectural work] here is focused on the big buildings, and the passive house is understood as only being residential. But the principles can be applied to big buildings and concert halls and swimming pools."

Both Bassett-Dilley and Klingenberg point out passive architecture thrived in the United States—and in particular the Champaign-Urbana area in central Illinois—in the 1970s in the wake of the country’s first major energy crisis. But the epicenter shifted to Germany and other parts of Europe when the U.S. lost interest a decade later. "My subscription to 'Solar Age' that I had in high school vanished when Reagan was elected and the oil embargo ended," Bassett-Dilley recalled.

In the late 1980s, what's now known as the German concept of the Passivhaus, which can reduce a home's energy use by 80 percent from conventionally built homes, was developed by Wolfgang Feist of that country's Institute for Housing and the Environment and Bo Adamson, a building science professor at the University of Lund in Sweden. From the first row of four townhouses completed in Darmstadt, Germany, in 1991, by 2010 there were an estimated 25,000 certified passive structures in Europe, and 13 in the United States.

Because of the enormous volume of passive projects in the Old World, several reports say that it now costs no more there to build passive than to build conventionally. Klingenberg said that stateside, the passive method's premium is now at about 15 percent. While specialized materials may come at a larger differential, there's compensation in the cost saved because of a dramatic reduction in the size of the heating equipment such a building requires. (Completely eliminating mechanical heating in a cold climate like Chicago's is a quixotic dream, both Bassett-Dilley and Klingenberg said.)

Bassett-Dilley's first-completed and best-known house, the River Forest home of Corinna and Rodrigo Lema, was completed for an estimated $175 per square foot, he said, in line with conventionally built homes. He said the project entailed a tightly knit team of planners, including Eric Barton of Biltmore Insulated Concrete and Brandon Weiss of Weiss Building & Development.

The home has exterior walls that are 18 inches thick and made of layers: foam-insulated concrete forms, more foam, an air cavity and siding made of SmartSide engineered wood. The clients, he said, "wanted something very strong, very resilient because of what's happening with our weather."

(top) This Oak Park house, currently under construction with an early 2015 target date for completion, is aiming for LEED Platinum. (bottom) A prototype for a passive bungalow.
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Also under construction with an early 2015 completion planned, this house in west-suburban Geneva is targeting certification by Passive House, Living Building and LEED for houses.

Airtightness is crucial to the success of a passive house, so the team worked closely to come up with a design that eliminated all thermal bridges, or places where the insulation barrier is penetrated. Just by adapting the design process to that principle, Bassett-Dilley said, "you end up learning a lot about building science."

Because airtightness can turn out to be its own worst enemy by trapping air in the home, "the passive house needs to breathe," he said. An energy recovery ventilation (ERV) system can capture 85 percent of the outgoing heat and 40 percent of the incoming humidity, "and make use of all of it," Bassett-Dilley said.

Although much of the technology can be locally or at least domestically sourced, for windows the team had to tap into European supplies. As of yet, "there's no American wood window that has a thermally broken frame, so you get these huge thermal losses," he said.

Training through Klingenberg's organization gave Bassett-Dilley other keys, he said. Based on principles that have been developed in Europe but tailored to meet American standards, the PHIUS training "gives an architect a whole menu of things to be real careful about," Bassett-Dilley said.

The contractor, too, has things to watch. Most notably, he said, contractors have to be vigilant about the materials subcontractors use, because of materials' role in enhancing or degrading indoor air quality. On the River Forest project, "Brandon shone," he said. "He's the most conscientious contractor I've ever met on air quality." Rather than risk letting subcontractors unwittingly undermine the goals of the project, Weiss supplied all caulks, adhesives, finishes and paints, ensuring they all meet the standards of the project.

"You don't want to inspect later and find out they used something else, hear them say, 'Oh, it's too late to change it now,'" Bassett-Dilley said.

Klingenberg is excited about the projects coming out of Bassett-Dilley's Oak Park studio, but she said the larger field of opportunity in Chicago residential architecture is in retrofitting the enormous stock of existing housing.

"There is so much fantastic building stock," she said. "There is so much capital already in it, but when we renovate, we renovate only a little and we leave savings on the table.

"We really need to get as many buildings as possible as far as we can get them." CA
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SAFE ZONE
NEW VETERANS CENTER INCORPORATES PTSD-FRIENDLY DESIGN

By Pamela Dittmer McKuen

HE VETERANS SERVED THEIR COUNTRY. NOW A NEW SUPPORT CENTER AND CLINIC AT THE JOHN MARSHALL LAW SCHOOL SERVES NOT ONLY THEIR LEGAL NEEDS BUT THEIR EMOTIONAL ONES AS WELL; IT WAS STRATEGICALLY DESIGNED TO BE SOOTHING TO ANYONE WHO SUFFERS FROM POST-TRAUMATIC STRESS DISORDER.

"Our goal was to create a safe, secure environment where vets feel comfortable coming to us," says Brian Clauss, an attorney and executive director at the school’s Veterans Legal Support Center and Clinic. "We want to help them get the benefits they deserve, so they can get on with their lives. We don’t want them sitting at home.”

The 5,300-square-foot clinic, which officially opened in September 2013, is the first private PTSD-friendly space in the Midwest. The concept is so new that project architect Chad Harrell, LEED AP, president at Griskelis Young Harrell, and his design team spent long hours researching the disorder and the scant reference material available—primarily interior design guidelines for hospitals and inpatient mental health facilities. Their research, along with input from the clinic leadership, inspired the transformation of 19 W. Jackson Blvd.

The street-level clinic is filled with natural light streaming through two perimeter glass walls. The largest portion of the floor plan is dedicated to an open office of workstations, each with extra bench seating. There are interview rooms, a high-tech classroom, kitchen and a private entrance. The space is awash in calming, earthy tones reminiscent of the military palette.

The clinic, which was student-founded in 2006, is a key component of the school’s experiential learning programs. Attorneys and professors supervise the students who work on all types of veterans’ legal issues, from the initial intake to the technical representation of benefits claims at the appellate court level. All services are free. The students field about 1,000 calls annually from veterans of all ages. Demand is increasing, attributable in part to the long duration of the wars in the Middle East and to the progressive health issues of aging Vietnam vets.

“One of the aspects of someone who has gone through a traumatic event is daily life presents triggers that can challenge them or create periods of stress,” says Harrell. “Their reactions can be anywhere from anxiety to, in the worst case, some type of violence. The biggest issue for us is a level of anxiety that may keep people away from using our facility.”

For reasons of medical privacy, Clauss declines to discuss the prevalence of PTSD on campus, except to say it afflicts clients, students, staff and professors.

According to the National Center for Post-Traumatic Stress Disorder at the U.S. Department of Veterans Affairs, experts believe PTSD occurs in 11 to 20 percent of veterans of the Iraq, Afghanistan and Gulf wars, and in about 30 percent of veterans of the Vietnam War. Women experience higher rates than men. In some cases, PTSD can be debilitating.

Harrell says that designing with a sensitivity to PTSD involves contemplating the nuances of dozens of small and large details. For instance, some veterans feel more secure in enclosed spaces while others prefer to be in open spaces where they can readily spot any approaching danger. For that reason, the clinic has two interview rooms: One is partitioned with frosted glass, and the other looks out onto the street.

The private entrance is an important element because it affords discretion. Before moving into the new space, the clinic operated wherever an empty room could be found.

“Oftentimes, people seeking services here have other challenges,” says Harrell. “They may be struggling in some way.
We don’t want to drag them through the whole building.”

And, because the color red can be a trigger, the school’s red temple logo is nowhere to be seen.

“One of the things we try not to do is have positions of authority,” says Clauss. “We have no desks. No one is wearing a coat and tie. The only desk is mine, and it’s behind a sheet of glass. If anyone comes in, I go out there to meet with them.”

The new clinic is part of a major renovation project undertaken by the school in 2010, but it didn’t start out that way. The school has long owned the 11-story terra cotta building at 304 S. State St., a Holabird & Roche design from 1906. For decades the school occupied the upper floors and rented the first floor to Walgreens. The school’s main entrance was squeezed onto the west side of the block, a former men’s athletic club at 315 S. Plymouth Court.

Walgreens vacated the premises in 2010, and the school seized the occasion to fashion a new public face on State Street, across from DePaul University’s Loop campus and a Barnes & Noble bookstore. Harrell led the design team, and Bulley & Andrews signed on as general contractor. Their efforts resulted in an expansive canopied entrance and a glass-walled student commons and cafeteria—and a strong connection to the comings and goings on the street.

The project was well underway when the three-story terra cotta building on Jackson suddenly became available. The school had long eyed the circa-1910 Sullivan-esque property, which was occupied by low-end retail tenants. With the purchase, the veterans’ clinic could expand immediately, with space left over for other clinics down the road. The school, which has a student population of 1,200, runs eight clinics in such specialty areas as fair housing, domestic violence and intellectual property.

“Our entire program has been built on making sure our students have lots of opportunities to get real practice, and at the same time making sure that practice is giving back to the community,” says associate dean and law professor Anthony Niedwiecki.

Along with the Jackson building came two major challenges. The first was its dilapidated condition. The roof leaked. Wood and steel beams were rotted. The vault beneath the sidewalk was in danger of caving in. And a doorway had been cut diagonally through the northwest corner, leaving a portion of the original interior weather-exposed; it had to be rebuilt to square with the foundation.

“This is a building that 99 percent of owners would have torn down,” says Harrell. “It is a small building in an area where real estate is expensive, and it needed a lot of work.”

Instead, the school invested in rebuilding the infrastructure, leaving Bulley & Andrews to figure out how to do it. The building
first had to be stabilized. It was constructed horizontally and vertically with wood beams and columns, some as large as 16 inches to 20 inches in diameter. Many were seriously compromised from years of water infiltration and haphazard remodeling jobs, and they had to be replaced, recalls Bulley & Andrews project superintendent Jay Quinn.

"At one point it was getting a little hairy because such large sections of the building were missing," he says. "People wondered how the building could still be standing with so much taken out of it. But we strategically removed and replaced sections before we took another section out."

The vault had been propped up with so many shores and jacks, it was like a forest, and the wall separating the vault from the subway was crumbling.

"You could hear people walking on the sidewalk above," says Quinn.

The vault, too, was rebuilt.

Another issue was the once-beautiful terra cotta façade. The building had been painted, as many terra cotta buildings were, and the construction team hoped the original glazed finish was underneath. It wasn’t. The finish had been stripped. To restore the façade as closely as possible to its earliest beginnings—and to match it as closely as possible to the State Street building—it was coated with high-performance glass fiber reinforced concrete and then tuckpointed.

"If you just painted the entire building, you wouldn’t see the nuances of the masonry," says Harrell. "We did the finish to get a good weather seal, and then re-did the joints. That’s what makes it read like a true terra cotta building."

The second major challenge was creating an environment that was sensitive to the veterans. That one also was successfully resolved, Clauss reports. Clients feel welcome and comfortable. The clinic even gets a couple of walk-ins a day, which never happened before. "PTSD design today is where ADA was 20 years ago," says Clauss.

The three-year project is a wrap, and both buildings have been submitted for LEED Silver ratings. It’s a restoration story on both micro and macro levels. The veterans’ clinic offers new life to military personnel, and the State Street entrance furthers the rehabilitation of one of the city’s most iconic thoroughfares.

"Before we started, this area was more transient and hadn’t been updated in years," says Bulley & Andrews senior project manager Brendan Keane. "The difference is significant. There are a lot of students who come through, and a lot of pedestrians coming to and from the trains and Millennium Park. It’s a pretty heavily traveled area. People appreciate what we accomplished."
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ON OCCASION OF THE INITIATIVE'S FIFTH ANNIVERSARY, LOCAL AIA CHICAGO 2030 WORKING GROUP TAKES STOCK OF PROGRESS

By Nooratan Bharani, AIA, and Steve Kismohr, AIA

The AIA 2030 Commitment, a voluntary pledge that architecture firms make to approach net-zero energy design of all buildings by the year 2030, has entered its fifth year in operation. The initiative is a challenge to architects to embody the ideals set forth by Ed Mazria's 2030 Challenge—encouraging us, as a profession, to reduce the energy consumption in the buildings we design and renovate. Although progress has been made as firms continue to reduce the predicted energy consumption of the buildings they design, reported energy usage is still falling short of the initiative's stated goals.

2030 Commitment Goals
Firms participating in the AIA 2030 Commitment report "predicted" energy use intensity (total energy use per square foot, or pEUI) for new buildings and additions, and lighting power density (watts per square foot used by the lighting equipment, or LPD) for interior-only projects, along with basic project information such as gross square feet and building use for all projects in which they are currently engaged. Beginning in 2009, participating firms began pursuing designs with the goal of 50 percent lower energy consumption for new buildings and additions with reductions based on the 2003 Commercial Buildings Energy Consumption Survey (CBECS) by the Federal Energy Information Agency. Simultaneously, LPD reduction is set for 25 percent below ASHRAE 90.1-2007 requirements. The goal is currently set at 60 percent and will continue to become more aggressive in coming years, culminating in 2030 when the design of buildings using zero-fossil-fuel-based energy consumption—i.e., carbon neutral—is anticipated.

Reported Results
A summary of the aggregated national data for the AIA 2030 Commitment was released during the national convention in June. Of the 275 national signatory firms, 79 submitted their 2013 project data, representing more than 1.6 billion square feet of work. The average predicted EUI reduction from the collective work of reporting firms is 34 percent—approximately 3 percent more than noted last year. The great news is that 7 percent of the firms reporting their data realized the goal of 60 percent reduction.

At the local level, the AIA Chicago 2030 Working Group received data voluntarily from 17 Chicagoland offices that designed 285
whole building/additions and 354 interiors projects in 2013—equating to 156,000,000 gross square feet (gsf). This amount is about 10 percent of the total gsf reported to the Commitment nationally. The Chicago data shows that overall, local firms are short of the 60 percent pEUI goal, but are progressing slightly better than the national average, averaging a pEUI at 38.7 percent regionwide. Chicago firms also are short of the 25 percent LPD goal, with interiors-only projects averaging lighting power density reductions at 16.9 percent.

Chicago's year-over-year improvements continue, with pEUI up by 2 percent and LPD up 1 percent, from 2012 data. Further, 69.1 percent of the gross square footage reported for 2013 has been analyzed with energy modeling tools, and 41.2 percent of analyzed space will have EUl data collected post-occupancy. Since Chicago firms volunteer other data such as building use types, the group is able to track progress on a more granular level. Office and residential use types make up over half of the square footage reported by local firms, with assembly, education, healthcare, laboratory and retail making up the remainder of the space.

**Reflection of the Past 5 Years**

Architects are leading the energy and sustainability conversation by encouraging building owners to incorporate energy reduction goals into their projects and leading design teams to meet these goals. Not only has this conversation gained relevance for firms that have signed the Commitment, but it also coincides with the adoption of energy codes by many municipalities and states. Using the roadmap developed by this initiative, signatory firms are tracking their portfolio of active projects to determine how to allocate resources to complete energy modeling, research new equipment and incorporate additional energy savings features into their projects.

The AIA 2030 Commitment is a useful tool in striving toward higher performing buildings. The Commitment provides structure, measurability and reflection for firms internally, as well as a reference point for conversation with peers. CA

To learn more about the AIA 2030 Commitment, consider attending an AIA Chicago 2030 Working Group meeting on the fourth Tuesday of each month. More information can be found at <www.aiachicago.org/community/2030-commitment>.
It's not too late to register

The 2nd Annual BUILDINGChicago/Greening the Heartland is THE major conference and trade expo serving architects, engineers, contractors, property owners, real estate developers, government officials, and community organizations in the Midwest.

New LEED v4 All-Day Workshop: Beyond the Requirements
Michelle Halle Stern, Prairie Lab
This full-day workshop will explore the technical requirements of key LEED v4 credits in the context of an integrative design process, organized by project phase, concept through occupancy, using a real project case study.

Keynote Addresses: Gordon Gill, Chris Pyke, and BOMA/Chicago
Monday, September 29: Gordon Gill, FAIA, OAA, AIBC, of Adrian Smith + Gordon Gill Architecture, and Chris Pyke, PhD, Vice President of Research for the U.S. Green Building Council.
Wednesday, Oct 1: Michael Cornicelli, of BOMA/Chicago, leads a panel discussion on “Leveraging Smart Grid Technology to Transform Chicago’s Commercial Buildings.”

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SARAH E. GOODE STEM ACADEMY
Client: Public Building Commission of Chicago
Architect: STR+Nia Collaborative (joint venture)
Structural Engineer: C.E. Anderson & Associates
MEP Engineer: dbHMS
Civil Engineer: Terra Engineering
Landscape Architect: Jacobs/Ryan Associates
Contractor: F.H. Paschen, S.N. Nielsen

EDGEBWATER BRANCH LIBRARY
Client: Public Building Commission of Chicago
Architect: Lohan Anderson
Structural Engineer: Matrix Engineering
Mechanical Engineer: Henneman Engineering
Electrical/Plumbing/PF Engineer: CCJM Engineers
Civil Engineer: Delta Engineering Group
LEED Consultant: HJKessler Associates
Landscape Architect: Altamanu
Contractor: Burling Builders
Environmental Consultant: Camp Dresser & McKee

LODER HALL RENOVATION
Client: Garrett-Evangelical Theological Seminary
Architect: McGuire Igleski & Associates
Structural Engineer: Campbell Associates Engineers
MEP Engineer: WMA Consulting Engineers
Civil Engineer: Gary A. Wiss
LEED Consultant: HJKessler Associates
Landscape Design: CYLA Design Associates
Contractor: W.B. Olson
Commissioning Agent: E Cube

The Passive-ist Front
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Architect: Tom Bassett-Dilley Architect Ltd.
General Contractor: Weiss Building & Development
Certification/Training: Passive House Institute US
Energy Recovery Ventilators (ERVs): Zehnder America

Safe Zone
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Architect: Griskelis Young Harrell
General Contractor: Bulley & Andrews
Owner: The John Marshall Law School
Glazing: Schaaf Glass Co.
Chilled Beam Systems: DADANCO
Mechanical Contractor: Air Design Systems
Heavy Timber Carpentry Contractor: W.W. Timbers
Steel Fabricator: The Ralph H. Simpson Co.
Masonry and Terra Cotta: B.A. Masonry Co.
Building Façade Restoration: Bulley & Andrews
Masonry Restoration
GFRC Replication of Original Terra Cotta: Plasterform

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AIA CHICAGO PLAYED HOST THIS PAST JUNE TO MORE THAN 20,000 ATTENDEES FOR THE 2014 AIA NATIONAL CONVENTION. From keynotes by Jeanne Gang, FAIA, to endless educational and networking opportunities, this year’s convention offered a chance to take the pulse of the profession in the capital city of architecture.

Here are some highlights from the frenzied three-day affair. CA

1. The main hall of the AIA Convention at McCormick Place, as the convention kicks into high gear.
2. The third edition of the AIA Guide to Chicago, for sale at the PechaKucha Dining + Design event.
3. The Architect’s Newspaper Dining + Design event in full swing at the rooftop bar of Koo Associates’ theWit Hotel.
4. The offices of Adrian Smith + Gordon Gill Architecture are transformed into a classical concert hall for this duet during the AS+GG Dining + Design evening.
5&6. Jeanne Gang, FAIA, shared the keynote stage with local artist and fellow MacArthur Fellow, Theaster Gates.
Chicago's Energy Savers

When the building needs to meet the New 2012 International/Illinois Energy Code, International Green Construction Code requirements, the Building Envelope is key to success.

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