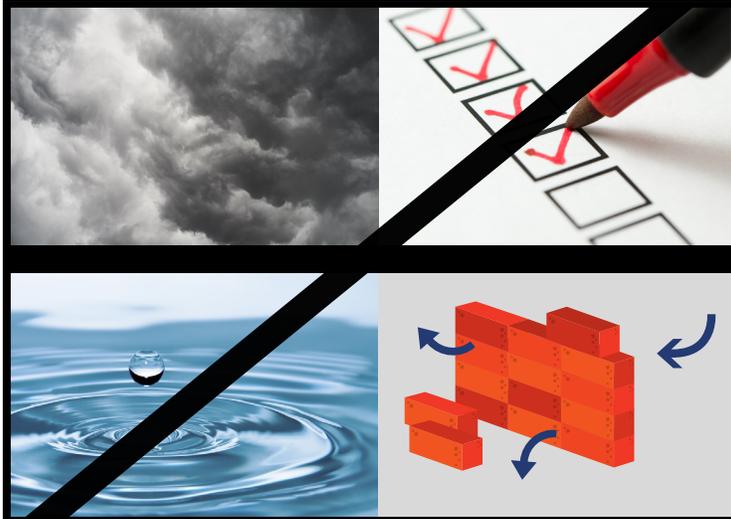


CHANGE ORDER

CONSTRUCTION SPECIFICATIONS INSTITUTE CHICAGO CHAPTER



Chapter Meeting

ABAA Research Initiatives and Impacts on Specification of AWB's

Tuesday, November 19, 2019

5:00-8:00pm

East Bank Club
Chicago, IL

See page 5 to learn more.

2019
November



2020 CSI2eye

Manufacturer Applications Close 11/22/19

See page 6 for details.



.....

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Upcoming Chapter Events

.....

11/7 Specifier Roundtable: BIM, BxP, MDS, LOD, LOI, to Specs and FM... Oh My!

11/13 Industry Roundtable: Construction Gets Lean & Mean with Continuous Improvement

11/19 Chapter Meeting: Updates on Air Barrier Association of America (ABAA) Research Initiatives and Impacts on Specification of AWB's

12/09 Social Event: Holiday Party & Fundraiser

1/06 Certification Preparation: CDT Exam Study Class

Included Articles

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10 *October 2019 Chapter Meeting Recap: Designing For The Birds*

11 *Goettsch, Thornton Tomasetti, Clark Tame 110 N. Wacker's Tight Site*



LEADERSHIP TEAM 2019-20

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CDT Certification Helps Communicate In A Common Language

Andrea Baird

NCARB, P.E., BECxP, CxA+BE, CCCA, LEED AP BD+C

The Construction Document Technology (CDT) certification is a cornerstone of CSI. It provides standardization for construction documents, the construction process, and roles and responsibilities. Simply put, it helps members of the construction team communicate with a common language. It is also an opportunity to gain a credential before or after obtaining a professional license or for people in the construction industry for whom professional registration is not available or not necessary. As a young professional, I even found it helpful while studying for the Architect Registration Examination (ARE).

The [CDT scholarship](#) is one of the Chapter's longstanding initiatives that we are proud of. It includes several benefits including a one-year membership to CSI Chicago, free registration for the chapter's [CDT Exam Study Class](#), reimbursement for study materials, and reimbursement for the exam upon receiving a passing grade. Each year there are a limited number of applicants so the chance of being awarded the scholarship is very good. Whether you are a designer, specifier, contractor or product representative, please share the scholarship information with your emerging professional colleagues.

We wish those taking the CDT this Fall the best of luck. Please share news of your passing the exam with using our [M2M Members On The Move Form](#) so we can acknowledge you in next month's newsletter.

M2M CONNECTION

Built By Members For Members


Submit content for the Change Order Newsletter using our M2M Connection Tool Box.











[CLICK TO VIEW OUR LEADERS](#)



Member Spotlight

Juan Franco, CSI

Colombia native, Juan Franco, started at Kewaunee six years ago. He had the opportunity to join a rotational program that allowed him to train in every key department of the company. He has installed Kewaunee products, worked as an estimator, project manager, managed the Central & Latin American markets, and now he manages the company's sales operations in Illinois. Over his career, Juan has had the opportunity to walk in many shoes as he even worked as a janitor at Kewaunee during college.

Juan's most memorable construction project was a recent project at Rutgers University in New Jersey with Barr & Barr (Construction Manager) and FLAD (Architect). When the project began, Juan's team was at a large deficit but he was able to turn the project around in six months, closeout the punch list, and manage to bring the project back to breakeven. He believes the biggest benefit of CSI Chicago is the networking and he enjoys meeting a variety of people in the industry which is important to him as a recent Chicago transplant.

He encourages the next generation to be responsive and offers that "The one thing that your customers will always remember is how responsive you were on their project." Juan feels that being responsive is the most valuable tool to an industry professional, especially when there are issues to be handled.



Member Tip

By: Juan Franco, CSI

Member Juan Franco recommends using Smartsheet as a tool for project management.

"Smartsheet is a great tool that I would recommend. This tool allows a large group of project managers at our company stay up-to-date on projects across the globe."

Smartsheet is a software as a service (SaaS) offering for collaboration and work management, developed and marketed by Smartsheet Inc. It is used to assign tasks, track project progress, manage calendars, share documents, and manage other work, using a tabular user interface.

Over 80,000 brands and millions of information workers trust Smartsheet to help them accelerate business execution and address the volume and velocity of today's collaborative work.

[Click here](#) to learn more about Smartsheet.

Share With Your Fellow Members

Visit our [M2M Connection Hub](#) to learn how you can be a part of the Change Order member newsletter by sharing your news and ideas with fellow members.



Remembering Chapter Member Laura Gagliano, CSI, AIA

Loving wife of Anthony "Tone" Gagliano, devoted mother of Anthony and Gina Gagliano, cherished sister of Vito (Debbie) Alberga, Danny Alberga, and Roseann (Dave) Schroeder. [Read more.](#)

New Chapter Members

New CSI Members

Matthew Mitchell, CSI
BKV Group

Daniel Petersen, CSI-EP
JADE Construction

CSI Members Joining Chicago Chapter

Mark Daniels, 29 yr CSI member
CSI, CCA, CDT, AIA
Jacobs Engineering

Dennis Hacker, 32 yr CSI Member
CSI, CCS, CCA, CDT, AIA, LEED AP, USGBC
SOM



Creative Vision

Cade Museum for Creativity + Invention, Gainesville, FL / installing contractor: Architectural Sheet Metal, Inc. Architect: GWWO Architects Photographer: horttonphotoinc.com Profile: 7/8" Corrugated Color: Galvalume Plus



7/8" CORRUGATED METAL WALL PANEL Galvalume Plus

The award-winning Cade Museum for Creativity + Invention, with its cylindrical core and extending arcs, almost appears to be in motion—a sense of movement reinforced by the running lines of the structure's corrugated metal wall panels.

Case study at [PAC-CLAD.COM/CADE](#)

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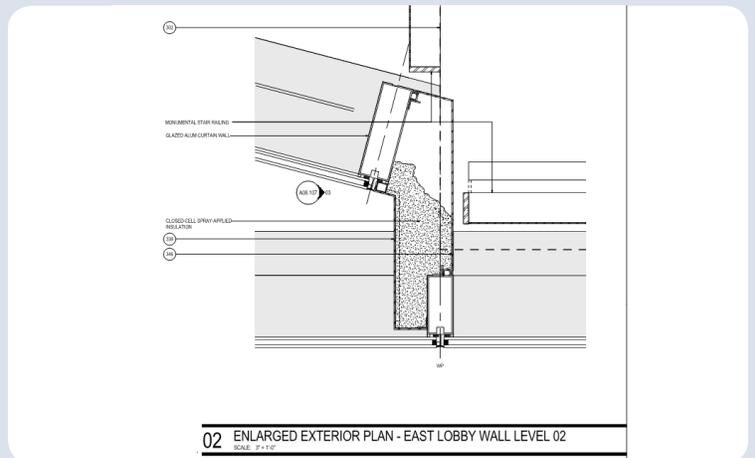
Project Showcase By Rath, Rath & Johnson, Inc.

The new Columbia College Student Center located at 754 S. Wabash Ave. is a multiuse space that is envisioned to facilitate collaboration between students across disciplines. Designed by Gensler and built by Pepper Construction Company (Pepper), the 114,000 square foot five-story structure features glass and aluminum curtain wall, vegetative roof areas, terraces, and black insulated metal panel. Rath, Rath & Johnson, Inc. (RRJ) was the building enclosure consultant for the project. RRJ worked collaboratively with Gensler and Pepper through the design and construction process to ensure performance of the enclosure systems while maintaining design intent.

Gensler achieves high-end design with cost-effectiveness through innovative and efficient use of common building enclosure materials. A central feature of the design is the curtain wall on the street-facing facades which is layered at some locations with angled interfaces. Exposed structure and staircases are celebrated as design features rather than being covered by finish materials. CSI Chicago members Corey Zussman of Pepper and Andrea Baird and Patrick Reicher of RRJ were among the project team members.



Photo Credit: © Tom Harris | Design by Gensler

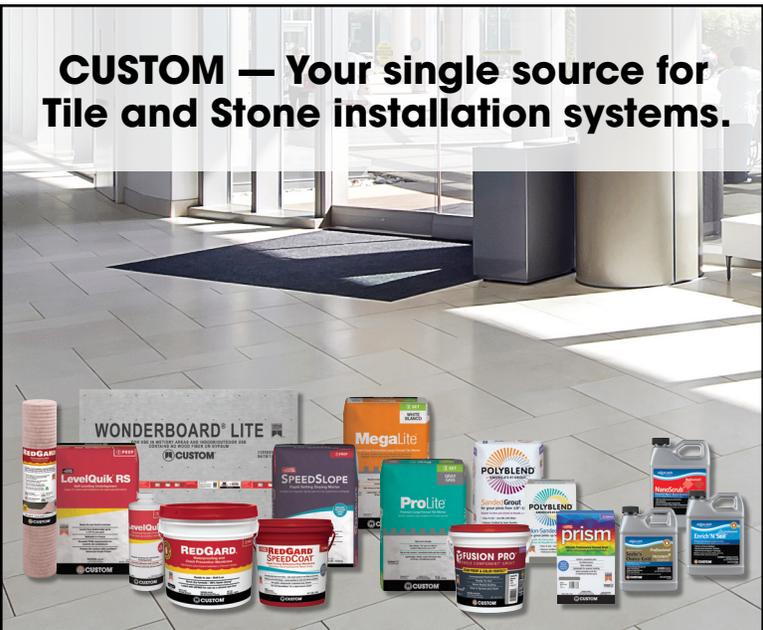


Conceptual plan detail at curtain wall systems interface (courtesy of Gensler).

Share Your Firm's Project

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Membership Milestones

30+ Years

William McHugh, MBA, CSI (32 yrs)
Firestop Contractors Intl. Association;
Chicago Roofing Contrs. Association;
National Fireproofing Association.

20 Years

Brett Bunke, CSI, CDT, AIA, LEED AP

Thank you to all of our members who are celebrating an anniversary with CSI Chicago this month. Membership Milestones features members who are celebrating 5 yrs, 10 yrs, 15 yrs, 20 yrs, 25 yrs and 30+ yrs.

Updates on Air Barrier Association of America (ABAA) Research Initiatives and Impacts on Specification of AWB's Chapter Meeting

Building enclosure design involves balancing the demands of air, water and thermal considerations. Air and water barriers (AWB) are often incorporated to provide weather protection which require continuity to perform successfully. Available guidelines for detailing and testing the installed AWB is limited, and installation practices are not consistent from project to project. While improved installation methods and consensus standards for validating air and water tightness are needed, ABAA has also identified a need for research to assess moisture detection approaches and the evaluation methodologies to employ. This session will discuss the research underway, as well as the background and context of the current practices related to AWB's.

Register to attend by Nov. 12, 2019.

FULL DETAILS & REGISTRATION

EVENT SPONSORSHIP OPPORTUNITIES

Date: Tuesday, November 19, 2019, 5:00-8:00 PM

Location: East Bank Club, Chicago

Cost For Dinner & Program:

CSI Chicago Members are Complimentary
Nonmembers \$60



Sarah K. Flock, NCARB, BECxP, CxA+BE
Co-Chair of the Research Committee for the
Air Barrier Association of America

Sarah is active in several professional organizations and speaks and writes on building enclosure thermal performance and condensation issues across the industry. She serves on multiple ASTM International committees and is a member of Executive Committee and Co-Chair of the Research Committee for the Air Barrier Association of America (ABAA) and the Past Chairperson of the Building Enclosure Council (BEC-Chicago).

Sarah has 17 years of architectural experience in the investigation, design, repair, and testing of building enclosure systems and materials performance. She is a recognized expert in exterior wall systems' water leakage and condensation investigation and resolution with a specialization in thermal performance and computational analysis of building enclosure systems and components.

CSI Chicago Platinum Partners



[Click here](#) to contact a local representative.

CSi2eye 2020

Technical Education Event

One-On-One Technical Education Event Build Relationships Through Knowledge Sharing

CSi2eye is a high-level technical education event. Through pre-arranged eye-to-eye 20 minute scheduled meetings, CSi2eye provides a platform for top decision makers from Chicago design & construction firms to meet with technical experts from a variety of manufacturers.

Date: Thursday, March 12, 2020

Location: East Bank Club, Chicago

[FULL DETAILS](#)

Manufacturers

In addition to getting new industry contacts, through your meetings and networking time you will be able to:

- Introduce new products, systems or capabilities to professionals in a very short period of time.
- Expose the depth of technical knowledge and resources your company has to offer.
- Gain valuable feedback from design/construction professionals and insight on their current needs.
- Hold multiple uninterrupted meetings with professionals in one day and in one location, that may otherwise take you weeks to schedule and travel to.

Cost: \$1200 per company upon accepted application

Manufacturer Application Window:

September 27 - November 22, 2019

[MANUFACTURER
DETAILS & APPLICATION](#)

Design & Construction Team

By participating in this event, you will be introduced to new product and system solutions.

CSi2eye is a complimentary event with limited space for design and construction professionals who are responsible for selecting and specifying materials and are committed to continual learning and staying up to date on products, applications, and resources available today. If you are an architect, specifier, general contractor, project manager, consultant, owner's representatives, etc., this event is for you.

Cost: Complimentary*

Sessions: Choose half or full day attendance

Morning Meetings: 9:00am - 12:00pm

Afternoon Meetings: 1:30pm - 4:30pm

Breakfast, Lunch, & Reception open to all attendees.

Applications: Apply early to ensure your seat at this popular event.

[DESIGN & CONSTRUCTION TEAM
DETAILS & APPLICATION](#)

**Design and construction professionals are architects, specifiers, general contractors, consultants, engineers, owner representatives, and other professionals involved in product selection for construction projects.*

Manufacturers Apply Today To Share Your Knowledge



BIM, BxP, MDS, LOD, LOI, to Specs and FM...Oh My!

Specifier Roundtable

Nov 7, 2019 from 12:00 PM to 1:00 PM

By Webcast (*In person attendance is full.*)

Presented by: Marcus Kim, AIGA, Architecture and Engineering Consulting Services Manager, Autodesk

In this round table, we will examine all of the funny acronyms, and conceptually map BIM processes, so you the specifier can tackle the challenge of incorporating BIM requirements into the Project Manual.

FULL DETAILS & REGISTRATION

BIM, BxP, MDS, LOD, LOI, to Specs and FM... Oh My!

Nov 7, 2019 from 12:00 PM to 1:00 PM (CT)

Lamar Johnson Collaborative
35 E Wacker Suite 1300, Chicago, IL 60601



Specifier Roundtable



Construction Gets Lean & Mean with Continuous Improvement

Industry Roundtable

Nov 13, 2019 from 12:00 PM to 1:00 PM

Pella Windows & Doors Showroom, Chicago

Presented by: John Zachara, Vice President at Integrated Facilities Solutions, Inc.

This course will introduce lean project delivery as an operating system relative to the design and construction industry. Participants will learn the key principles that are foundational to lean and be introduced to collaborative tools and approaches to eliminate/reduce waste from their projects.

FULL DETAILS & REGISTRATION

Construction Gets Lean & Mean with Continuous Improvement

Nov. 13, 2019
12:00 PM to 1:00 PM

Pella Windows & Doors Showroom
Chicago, IL



Industry Roundtable



Renee Doktorczyk, FAIA, CSI, CCS, SCIP
Renee@ArchiTechSpec.com

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Holiday Party & Fundraiser

Social Event

Dec 9, 2019 from 5:30 PM to 9:30 PM

Erie Cafe, 536 W. Erie Street, Chicago, IL

Join CSI Chicago on Monday 12/9/19 for our annual holiday party and fundraiser. There will be great food, drinks, raffle prizes, a silent auction and of course holiday cheer.

Timeline: 5:30pm Appetizers & Cash Bar, 6:45pm Dinner

Cost: \$40 for Chapter Members, \$50 for nonmembers (Appetizers and dinner included.)

Register by: Wednesday, December 4, 2019

[FULL DETAILS & REGISTRATION](#)

[EVENT SPONSORSHIP OPPORTUNITIES](#)

Holiday Raffle & Silent Auction Benefits CSI Chicago Foundation

A holiday raffle and silent auction will be held at the holiday party and all proceeds will benefit the [CSI Chicago Foundation](#). Past prizes included sports tickets, wine, gift cards, chocolate, sports swag, lobsters and more!

Raffle tickets: \$5 per ticket or 5 tickets for \$20 at the door of the event. All winners will be announced towards the end of the event.

Silent Auction: Bidding will take place at the event. All winners will be announced towards the end of the event. [See confirmed silent auction items.](#)

Payment Options: Cash, check, or credit card payment will be accepted.

Contribute a raffle prize or silent auction item!

Help us with our fundraising efforts by contributing a raffle prize. No matter size of the prize or amount, any contribution is appreciated! All contributors will be recognized on the prize display table and in our holiday party event recap. Let us know about your bring along item or contribute prize money on the registration link.

Three ways to contribute:

1. Bring your own raffle prize to the event. (suggested value \$25-\$200).
2. Bring your own silent auction item to the event. (suggested value of \$200+).
3. Contribute money through the event registration link and we will personally shop for raffle prize(s). If you can't attend and wish to contribute, please contact Beth Winkler at administration@csichicago.org.



Event Sponsor

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CDT Exam Study Class

Certification Preparation

Class Dates*: Mondays, Jan 6 - Mar 23, 2020, 5:30 - 8:00pm

Location: HACIA 650 W. Lake Street, Suite 415, Chicago

Construction Specification Institute's Construction Documents Technology (CDT) Certification provides foundational training in construction process, roles and responsibilities, and construction documentation for architects, contractors, contract administrators, specifiers, and manufacturers' representatives for decades. This study class will provide you a better understanding of how projects develop from conception to delivery and the documentation involved while helping you prepare for the CDT exam.

The class provides a conceptual understanding of the entire construction process, and concrete skills in construction documentation development and administration, specification writing and enforcement, product research and sourcing, communication with the design and contracting teams. Each class is taught by industry leaders from both the A/E and Product Representative Community. Classes include power point presentation followed up with quizzes that will help to reinforce the content of the session. The last class includes a practice exam to replicate the CDT exam. Attendees get exposure to industry leaders as teachers that are willing and able to answer questions.

Continuing Education: 15.0 AIA/CES
(Must attend at least 8 classes)

Class Fee: \$150 to CSI Chicago members,
\$300 for non-members

*Class runs for 11 weeks. Schedule posted is for 12 weeks to allow for one cancellation due to weather or other unforeseen circumstances.

[FULL DETAILS & REGISTRATION](#)

Scholarship applications for the 2020 class and spring CDT exam close November 22. Click the link below to find out if you qualify for a scholarship.

[CLASS SCHOLARSHIP DETAILS](#)

Sponsorship Opportunity

Our CDT Exam Study Class sponsorship opportunity provides a cost efficient way to promote your business and/or products to both the class attendees and our membership as a whole. Your sponsorship will also be supporting our mission of building knowledge and improving project delivery

[CLASS SPONSORSHIP OPPORTUNITY](#)

Applications for 2020 CDT Scholarship Due 11/22/19

If you or someone you know is an emerging professional with less than 10 years' experience and is planning on taking the CDT Exam in the Spring of 2020 and attending CSI Chicago's CDT Study class this fall the 2020 CSI Chicago CDT Scholarship is perfect. Those interested need to apply by 11/22/19.



[LEARN MORE & APPLY](#)

Donate Prizes for Our Holiday Fundraiser



Show your holiday spirit by donating a prize for the CSI Chicago Chapter's Holiday Raffle and/or Silent Auction. All raffle ticket and silent auction proceeds benefit the [CSI Chicago Foundation](#). Suggested value of raffle prizes is \$25 - \$200 and suggested value for silent auction prizes is \$200+. Click the button below to learn more about the event and how to donate a prize.

[LEARN MORE](#)

New Membership Brochure

CSI Chicago has a new membership brochure that can help members talk to prospective members about the benefits of the chapter. It is a one page, 2 sided brochure that quickly and concisely lets non-members know who CSI Chicago is, how much it costs and the benefits of membership. You can pick up hard copies at Chapter events or utilize the PDF version through the link below.

[VIEW PDF BROCHURE](#)

New Sponsorship & Marketing Brochure

CSI Chicago has a new sponsorship and marketing brochure that can help members talk to prospective sponsors/partners about the benefits or sponsorship/marketing and the different sponsorship/marketing opportunities our chapter offers. It is a one page, 1 sided brochure that you can pick up hard copies at Chapter events or utilize the PDF version through the link below.

[VIEW PDF BROCHURE](#)

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¹ In testing performed in accordance with ASTM testing standards, Pella's Duracast® fiberglass composite has displayed superior performance in strength, ability to withstand extreme heat and cold, and resistance to dents and scratches.

² U-Factor of Duracast frame is 2.4 times greater than that of thermally broken aluminum when compared in thermal testing.

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October 2019 Chapter Meeting Recap: Designing For The Birds

Written by: Brad Schwab, CSI, CDT

75+ attendees gathered on Tuesday, October 22, 2019 at East Bank Club in Chicago for our October Chapter Meeting. It was a great night of networking and knowledge sharing.

The night lead off with our President Andrea Baird welcoming our members and guests. Andrea recognized our 4 new members since the last chapter meeting and reviewed our [upcoming events](#). She also highlighted that [2020 CSI2eye](#) manufacturer applications as well as the chapter's [2020 CDT Scholarship](#) applications are closing Friday 11/22/19. Andrea also shared the sad news learned earlier in the day of the passing of our member Laura Gagliano.

Tim Blatner, then introduced our speakers for the night Judy Pollock and Carl Giometti. Judy is a Bird Conservation Consultant from Living Habitats and President of the Chicago Audubon Society. Carl is a Project Architect from Perkins & Will and President of the Chicago Ornithological Society. Judy and Carl co-presented on Designing For The Birds. Chicago holds many perils for birds, it's true - but it is also the home of ground-breaking partnerships between the building community and bird conservationists - first the Lights Out program, and now the Bird Friendly Design ordinance.

Judy and Carl explained why Chicago's location spells danger for migratory birds, how the proposed new ordinance will help, and what the basics of bird-friendly design are. Attendees learned the following:

1. The importance of addressing bird activity and migration while developing designs for Chicago buildings.
2. How the Chicago Department of Buildings (DOB) is working with local experts to develop the Bird-Friendly Building Ordinance.
3. How the ordinance will impact Chicago's design and construction industry.
4. Effective ways of designing bird-friendly buildings through use of materials, lighting, landscaping, and technology.

Judy and Carl also recommended anyone looking to learn more on bird friendly design, the research, Chicago's proposed ordinance, and/or building solutions to visit www.birdfriendlychicago.org.

Thank you to everyone who attended to make this another successful Chapter Meeting event. Special thanks to Judy Pollock and Carl Giometti and our tabletop sponsors – dormakaba USA Inc, Hunter XCI, Life Safety Hardware Consultants, S.J. Mallein & Associates, and PULP STUDIO. View our [event photo album here](#).

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Goettsch, Thornton Tomasetti, Clark Tame 110 N. Wacker's Tight Site

Reprinted from ENR Midwest



Recommended by: Melissa Gibson AIA, CSI, CCS, CCA, LEED AP BD+C

After taming the tight site of 150 N. Riverside, Riverside Investment and Development, Goettsch Partners, Clark Construction and several other members of that project team found themselves building another office tower directly across the Chicago River from their award-winning project completed just two years ago.

“You don’t often get a chance to bring to bear the lessons learned and all of the efficiencies gained from the start of and the end of a project, and try to roll them immediately to the next one,” says Anthony Scacco, principal at developer Riverside Investment and Development. “Same architect, same contractor, same developer. Those [efficiencies] have borne themselves out. The glass crews are hitting more than 90 panels a day, which is where they finished off on [150 N. Riverside]. So they’re achieving efficiencies as if they’ve been going at it for six months, and they just started three months ago.”

110 N. Wacker is a \$760.7-million, 817-ft-tall, 56-story office tower on the site of the former Morton Salt Co. headquarters, a 1958, five-story, low-rise office building that was a classic example of mid-century modern architecture. It turned its back to the river like most pre-2010 Chicago construction and was purchased in 1990 by General Growth Properties, an operator of shopping malls that had used the structure as its headquarters.

Dallas-based Howard Hughes Corp. bought the 43,000-sq-ft site from GGP in 2014 for \$12.3 million. Howard Hughes partnered with Riverside to put a 1.77-million-sq-ft office tower on it with a design from Goettsch. Unlike 150 N. Riverside, 110 N. Wacker’s site is not challenged by rail tracks and a tight area for a foundation, but it is a trapezoidal parcel without much space for a city-required 30-ft riverwalk. A compromise between the developers and the U.S. Army Corps of Engineers, which manages the Chicago River for the federal government, over historic preservation of the some elements of the Morton Salt Building also required a stormwater outfall structure near the



Rendering courtesy of Goettsch Partners.

site—essentially a big hole cut in the steel seawall below it to allow stormwater to flow from the tower into the Chicago River. In May 2017, Bank of America signed on as the anchor tenant of the new office tower committing to rent 500,000 sq ft.

“It was a matter of knowing that we could fit it right, and that we could satisfy some of those critical aspects that we want for a building that’s going to meet the demands of the market,” says Aaron Haas, executive vice president of design and construction management at Howard Hughes. “With the lease requirements that the market expects to see [it was a matter of determining] what kind of density and economies of scale could allow us to overcome some of the site challenges.”

Goettsch’s design opted for three 55-ft-tall steel tridents to hold up the entire western river side of the building and create space for the city-required riverwalk. Chicago has demanded that riverwalks be “open to the sky” and free of obstruction since the 1990s, something that simply would not work on a site as tight at 110 N. Wacker’s, at least not for an office tower of this size. The city was willing to compromise on a solution and has been more responsive to developers in recent years.

“That site was trapezoidal. Which made us go in a direction that I don’t think any of us really thought we were going to go, which is giving it a core that’s kind of stepped, which allowed us to maintain a 45-ft lease span,” says James Goettsch, chairman and co-CEO of Goettsch Partners, who was recently honored with the Council on Tall Buildings and Urban Habitat’s Lifetime Achievement Award. “It was a little atypical, and then the whole riverwalk thing. We were fortunate that the city accepted the idea that once you were 55 ft above the riverwalk, it’s the equivalent of open to the sky.”

The stepped center core plan allows the long conference rooms and open views of the river and west that clients desired. A staggering of the core walls is reflected in a series of rectilinear setbacks along the west facade, maintaining an orthogonal 5-ft planning module. There will be 14 corner offices per floor. The 56 floors themselves have composite steel floor framing

Article continued on next page.



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Goettsch, Thornton Tomasetti, Clark Tame 110 N. Wacker's Tight Site (Cont.)

Reprinted from ENR Midwest

and the aforementioned stepped concrete core with a steel outrigger and belt truss system, sawtooth perimeter columns on the west side, two levels of cast-in-place concrete basement and rock-socketed caissons. Even though the whole building is planned to be encased in aluminum and glass curtain wall, the space atop 110 N. Wacker's tallest setback is defined in the plans as the city's highest commercial deck.

"I think the fact that [the riverwalk is] not open to the sky makes that side, in effect, like a covered walkway, so that makes it unique," Goettsch says. "Because the site was trapezoidal, it just happened that it worked out on a 30-ft, 5-ft setback. So every 30 ft, except for that first one, is a 5-ft setback. That gives the building, I think, some of the character we're always trying to put in an office building."

Structural engineer Thornton Tomasetti initially had the 45-ft-high tridents going up one more level in the original plan so they could form a triangular base that was more of a traditional truss.

"That way you would have multiple load passing and there's no inherent instability under unbalanced loading," says Eric Fenske, vice president at Thornton Tomasetti. "Goettsch and the client didn't like that, they wanted that office space to be free and clear, which is understandable."

Fenske said Thornton Tomasetti's engineers had to look at if there's live loading on one side of the building and not the other.

"The one column on the very north trident, the very north diagonal of that trident, only goes up about half the building because that's where the big setback is at," he explains. "So that had equal loads in it without load balance or anything, meaning that that whole trident, as a whole, wants to rack a little bit. To get around that in our design, we have a really large header beam at the top of these tridents and we diagonalized the floor at level four to take out any horizontal load back to the core. The core is actually there to stabilize it."

The columns on the edge of the sawtooth are not in an ideal location. Fenske says that ideally, the slab edge of the sawtooth, where it comes back, would be placed on the outside of those columns so you could have a cantilevered beam coming straight off the column rather than a column being tucked inside it.

"Basically, we've moved the vertical part of the sawtooth over, the 'short' edge of it," he says. "Normally, we'd want to move them a bit north to have more of a standard framing system, but leasing didn't want that and that caused us to go through some mathematic gymnastics."

Of the 66 existing batter piles left over from the Morton Salt Building, general contractor Clark Construction removed 12 batter piles and replaced them around the new foundation with 12 new drilled tie-back anchors. To place most of the steel components of the building, including the tridents and the header, Clark used a barge-based Manitowoc MLC300 on the

river and welded and seated them in place so they could work off the steel structure as soon as it left the crane.

"The way we like to engineer, particularly structural construction, is let's over-crane it, let's place everything we can," says Chris Phares, Clark vice president. "Put in as many large components as possible. That helps on quality control. It helps on safety. Because we're doing less work in the field."

The stormwater outfall structure for the city sewer next to the site created some problems due to unknown conditions.

"We thought there was a wall so we could just open cut the area to get down to lower level two there by the sewer line and that wasn't the case," says Fenske. "We had to put in an earth retention system of sheeting for an extra length of area there to support the dirt and the sidewalk and the road there. The earth retention [system] stayed in place, and we poured our retention walls against it. We didn't want to put too much load on that sewer. That [geo-]foam actually has a lot lighter density than dirt."

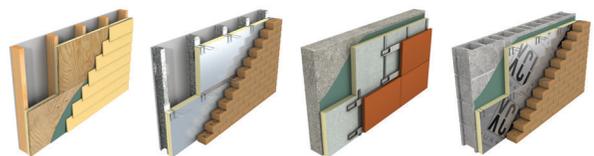
Fenske says the team is performing a lift every three days now that Clark and its sub-contractors have reached the repetitive floors. Glass has been installed on more than half of the tower. Phares says the project is on schedule for its Q4 2020 completion.

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CSI-Connect Community: Your Member-to-Member Network

News From CSI National

[CSI-Connect](#) is your member-only forum for talking shop with fellow CSI members in a welcoming, virtual environment meant for expanding your network, showcasing your expertise, and soliciting feedback from your peers.

Recent discussions on [MSDS in electronic document submittals](#), [crane and hoist load testing certifications](#), and [sealing and signing Divisions 00-01](#) have generated a lot of engagement, and you can be part of the conversation.

Showcase your expertise by responding to other member questions or jump in with your own - you're probably not the only one wondering about something! Work your network with the [CSI-Connect community](#).

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North Central Region Conference Save the Date

Events From CSI NCR

Flint Hills Chapter will be hosting the 2020 North Central Region Conference on April 30 - May 2, 2020 in Lawrence, Kansas. Save the date!

LEARN MORE

That's A Warp - CONSTRUCT 2019 A Huge Success

News From CSI National



Thanks so much to all who attended CONSTRUCT 2019 last week in National Harbor, Maryland. The CSI booth was bustling with activity all week long with members stopping by to hear the latest from CSI, to see what educational offerings are on the horizon in the Learning Library (LINK), and to be interviewed in the brand new CSI Studio.

Congratulations go out to all the honorees at the Honors & Awards Ceremony, particularly our newly-inducted Fellows, John Dunaway, Kermit Duncan, and Cherise Lakeside.

[See photos](#) from the event on CSI National's Facebook page. Facebook account not required to view photos.

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A Building Science To-Do List - Three Buildings, Three Big Lessons Learned

November 14, 2019, 5:30-8:00pm

Gensler, 11 East Madison, Suite 300, Chicago, IL

What are some of the building science questions without widely known answers? The aim of this talk is to wrap up a range of topics, some coming from the audience. White roofs; airtight roofs. Parapets and parapetitis. Favorite case studies. Protection against nuisance flooding. Corners. Energy retrofits in historic buildings.

[FULL DETAILS](#)

CRCA's 37th Annual Trade Show & Seminars

January 15-17

Drury Lane Conference Center, Oakbrook Terrace, IL

With over 135 exhibitors and over twelve hours of programming, this FREE event attracts roofing contractors from all over Illinois, as well as Wisconsin, Indiana Michigan, Iowa and beyond. Continuing education learning units are offered to roof consultants, architects, specifiers and building officials, who can attend for the FREE to receive this valuable roofing and waterproofing industry education. Registration will open in November.

[FULL DETAILS](#)

JBC Masonry Innovation Competition

Submission Deadline: December 15, 2019

\$30,000 in monetary awards in 3 categories:

- Students: Undergraduate or graduate students
- Young Architects/Engineers (under the age of 40)
- A/E Firms, Individual Architects/Engineers, & Cross-Category

Multidisciplinary teams are encouraged in all categories to help facilitate a well-conceived solution, but individual entries are also permitted. There are no restrictions on team size.

[FULL DETAILS](#)

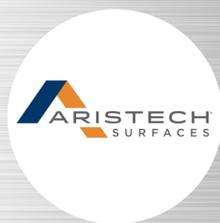
Free Version of New Chicago Building Code Now Online

The Department of Buildings announced that free, read-only versions of the 2019 Chicago Construction Codes are now available online on the International Code Council's (ICC) website. The new codes bring Chicago's core requirements for the construction, renovation, and maintenance of buildings into much closer alignment with national standards.

Access the free online codes and learn about purchase opportunities through the link below.

[FULL DETAILS](#)

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