Program Information

Wednesday, January 25, 2017

Orange County CSI Chapter
January Meeting

Joint Orange County/Los Angeles/Inland Empire CSI Chapters Meeting

Program: The Future of Construction: What's the limit? Machines, Manpower, or the City?

Speaker: Dr. Behrokh Khoshnevis
Director, Center for Rapid Automated Fabrication Technologies

Please join us on January 25, 2017 for the joint meeting of the Orange County, Los Angeles and Inland Empire CSI Chapters. The Los Angeles Chapter is hosting this meeting.

Our after dinner presentation will be conducted by Dr. Behrokh Khoshnevis, Director of the Center for Rapid Automated Fabrication Technologies (CRAFT). Are you ready for a robotic construction crew? How close is that future?

You will learn about the future of construction from award winning visionary Dr. Behrokh Khoshnevis. Dr. Behrokh Khoshnevis has won multiple awards for the development of Contour Crafting (CC), a mega-scale 3D fabrication process aiming at automated on-site construction of whole structures, as well as subcomponents. Since the potential of CC has become evident from experiments with various materials, geometries and scales, the next step is entire structures. We are already seeing building components where plumbing and electrical utilities are embedded.

Are your documents ready for an environment where robotic construction executes a single building or a colony of buildings? Join us to hear how close this technology is to being a reality, learn about the hurdles to getting it approved for use, and brainstorm with our speaker on solutions to how to get City building departments to approve this technology.

Time: 5:30 - 6:15 PM Social/Product Displays/No Host Bar
6:15 – 8:15 PM Dinner & Program

Location: Marriott Courtyard Hotel
500 East 1st Street
Long Beach, California 90802

Parking: Validated for self-parking
Valet parking $28.00

Cost: Prepaid for LACSI Members with reservations
$10 for LACSI Members without a reservation
$50 per person for OCCCSI or Non-Members with a reservation
$60 per person for OCCCSI or Non-Members without a reservation

Tabletops: Product representatives are invited to display at this meeting. To reserve a tabletop, please go to www.laksi.org.

Reservations: Required by Friday, January 20th, 4:00 PM. LACSI members must register at the laksi.org website. OCCCSI members may respond back to the email blast or call 714-434-9909.
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**SAVE THE DATE**

**February 21, 2017**

**2017 McGraw-Hill Construction Outlook**
PC DOES NOT STAND FOR “PARTLY CLOUDY”

Happy New Year and I hope everyone had a great holiday season. Political correctness aside, the last time I checked, this country was founded by Christians who stole this land fair and square. So I hope you had a great Christmas season. Catholic Spaniards stole Mexico fair and square too, and they say Feliz Navidad. If you are offended, I apologize and hope you had a nice Chanukah or Kwanzaa. Or you are just happy you made it to 2017.

So what could I write about? Something in the spirit of Christmas? “A Charlie Brown Christmas” popped into my head. How controversial and/or offensive could Snoopy and the gang be?

During the making of the animated Christmas classic A Charlie Brown Christmas, Peanuts creator Charles Schulz had a meeting with the show’s producer and lead animator. The discussion concerned Schulz’s insistence about including a New Testament scripture reading of the Christmas story from the Bible. The scripture reading is Linus Van Pelt’s response to Charlie Brown yelling out, “Isn’t there anyone who knows what Christmas is all about?” It goes like this:

Luke 2: 8-14, King James Version:
And there were in the same country shepherds abiding in the field, keeping watch over their flock by night. And, lo, the angel of the Lord came upon them, and the glory of the Lord shone round about them: and they were very much afraid. And the angel said unto them, Fear not: for, behold, I bring you good tidings of great joy, which shall be to all people. For unto you is born this day in the city of David a Saviour, which is Christ the Lord. And this [shall be] a sign unto you; Ye shall find the babe wrapped in swaddling clothes, lying in a manger. And suddenly there was with the angel a multitude of the heavenly host praising God, and saying, Glory to God in the highest, and on earth peace, good will toward men.
That’s what Christmas is all about, Charlie Brown.

Wow! It was just a little controversial in the end. The movie studio didn’t like the idea of the religious overtones with a perception people would be put off by it. Coke (the main sponsor) didn’t like the screening because the short feature had no laugh track. It had young kids (many too young to read) as the voices and they had objections to Linus’ speech.

Further “Goggling” produced current news about different school districts around the country against Charlie Brown for church and state issues.

What’s next to ban? I know, Halloween. This pagan ritual must be stopped…. I have a better idea. I will quote the great orator Don Henley: “Get over it!!”
By Annette Wren, FCSI, CDT

What is the significance of “The Way We Were” and “The Way We Are”? Taking a historical look at CSI, you need to know one thing. CSI is all about the chapters! CSI Chapters are of the utmost importance to the strength and survival of CSI. CSI Chapters rule! Sadly, this fact has been lost on some of the people in charge.

“The Way We Were” approached 30,000 CSI members at one time - not so long ago. Unfortunately, management at that time wanted CSI to mirror another trade association and format. In addition, my judgment is that management tried to compromise CSI and put more emphasis on passive participation. The emphasis was to look to the top of CSI for growth and all resources. There was a focus toward the future computerized society - less direct participation. The emphasis on specifications was also compromised. They started to dig the grave of CSI. The CSI Chapters as the main contact for members were compromised. Our membership numbers plunged downward.

What about CSI without specifications? Some want to get away from our emphasis on specifications. Take the word “specifications” out of our name because that is “old school”. Really? Specifications will be around to create structures into the distant future. Robots may take over manual labor in the construction process, but you can bet your last penny that human construction attorneys will be alive and well into the next centuries. What is one of the first things requested in the construction litigation process? Specifications! AND, these creative attorneys will hold accountable the “canned spec” companies to a higher degree as well. These companies attempt to avoid bearing legal responsibility for design deficiencies by the nature of their business as a resource only. They rely upon the reality that design professionals (or robots) are making the choices. The “canned spec” companies and specifiers try to protect themselves from liability in the process of construction. These issues will live on. Specifications do and will matter. CSI needs to remain totally engaged in the “front seat” of this process and specification issues.

What about that focus on computer contact only? Some have predicted that CSI and trade associations will disappear in the future. People will not leave their cubbies. They will choose to only communicate remotely. The way of the future is to have less contact. Really? IF that is so, then the end of humanity is near. Active CSI Chapters will not allow their existence to be remote environments. The most vital and active CSI Chapters will survive. CSI Chapters that remain to be vital resources for members by creating activities that empower them will not disappear. CSI Chapters will reach out and touch someone in a...
Among the things specifiers grumble most about are the typical architect’s lack of knowledge about how things work and how they go together, and the belief that “If I can draw it someone can build it!”

Some architecture schools do include courses about the practical aspects of architecture, but those courses are often optional, so most architects graduate with a lot of knowledge about visual design, planning, and presentation, but little understanding of materials or construction.

It’s fine to have a presentation about masonry, but so much more could be learned from participants getting their hands dirty. It’s easy to draw a 4 x 4 x 8 brick, but what does it feel like? It takes no more effort to draw a 3-5/8 x 2-1/4 x 11-5/8 brick or a 3-5/8 x 3-5/8 x 15-5/8 brick, or, for that matter, a 12 x 8 x 16 concrete masonry unit, but what difference does it make to the mason? It doesn’t take any longer to draw a large masonry unit, but does the size affect installation time?

Until you pick up a brick, mix the mortar, and try to build a wall, you simply cannot appreciate what your details mean in the real world. This shortcoming presents a tremendous opportunity for continuing education programs.

In June of 2000, twenty-five architects from my office went to the masonry apprentice school in St. Paul for an afternoon of fun, down-and-dirty continuing education. The program was set up by Olene Bigelow, our local International Masonry Institute (IMI) rep, and contact for the Brick Industry Association (BIA).

The apprentices set up a series of stations, each showing a specific part of the job. Demonstrations included reading drawings and specifications, estimating, mixing mortar, laying brick and CMU of various sizes, installing door frames, and more. After the book learnin’ discussions, the architects got their hands dirty at each station and learned how their decisions affected construction and schedule.

(continued on page 15)
We are proud to present our exhibitors from our Construction Products & Services Expo 2016 on October 13th. This column will report on groups of exhibitors in each issue right up to the next show. Learn more about them right here!

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Program Information
Tuesday, February 21, 2016

Orange County CSI Chapter
February Meeting

Program: 2017 McGraw-Hill Construction Outlook

Speaker: Cliff Brewis Honorary AIACC
Senior Vice President & Western Region Director of
Operations for McGraw-Hill Construction
Information Group

Join us to hear the McGraw-Hill Construction Information Group thoughts and forecast for the economy and construction in 2017. Our speaker will be Cliff Brewis, Senior Vice President & Western Region Director of Operations for McGraw-Hill Construction Information Group.

Cliff Brewis is responsible for the news gathering operation of McGraw-Hill Construction/Dodge, and is a frequent speaker on the construction forecast. He has over 30 years experience in construction. Cliff has been employed by McGraw-Hill for over 25 years, in both sales and operations. Cliff is a graduate in Economics from the University of Michigan, Ann Arbor. He has an MBA from American University in Washington D.C.

Join us for this very informative meeting. Our industry has relied upon the yearly projections of McGraw-Hill Construction/Dodge for many years. Cliff Brewis never disappoints!

Time: 5:45 - 6:45 PM Social/Tabletop Exhibits/No Host Bar
6:45 - 7:30 PM Dinner
7:30 - 8:30 PM Program

Location: Phoenix Club
1340 S. Sanderson Avenue
Anaheim, California

Directions: Orange County Thomas Guide 769-EU and 799-E1,
57 Freeway to Ball Road exit, east to Phoenix Club Drive,
south to Sanderson Avenue, right to entrance

Parking: Plenty of free parking

Dinner Cost: $35.00 cash/check discount for OCCCISI members and nonmembers with reservations.
$45.00 at the door. (No-show reservations will be billed)

Tabletops: Product representatives are invited to display at this meeting.
The cost for a tabletop is $80.00.
Contact David Jordan Smith at 949.250.0880 for information.

Reservations required by February 17, 2017. Call OCCCISI at 714-434-9909.
Event: Construction Products & Services Exposition 2017
Marconi Automotive Museum & Foundation for Kids
1302 Industrial Drive
Tustin, California 92780

October 12, 2017

Sponsor: Orange County Chapter Construction Specifications Institute

Invitation:
• You are invited to participate as an exhibitor.
• Display your products for local design professionals, owners, contractors, facilities managers and others.
• Exhibit hours are 4:30 p.m. to 7:30 p.m.
• Gourmet hors d’oeuvres passed during exhibit hours.

Reservation: Please make your check payable to the Orange County CSI Chapter. Upon our receipt of your check, you will then receive set-up details and location confirmation. No credit card reservations will be accepted after October 10th. For questions, please call Dave Brown (714) 329-8498, E-MAIL dbrown.dpe@gmail.com or Bryan Stanley (714) 221-5520, E-MAIL: bryan@tsib.org.

Prices of Exhibits: BEFORE, August 1, 2017 (Postmarked) DISCOUNT CHECK/CASH
- Tabletops (6’ x 2-1/2’ table) ........................................... $600.00 each
- Mini-Booths (8’ x 2-1/2’ table) ....................................... $700.00 each
- Booths (approx. 10’ x 8’) ............................................. $900.00 each

AFTER, August 1, 2017
- Tabletops (6’ x 2-1/2’ table) ........................................... $700.00 each
- Mini-Booths (8’ x 2-1/2’ table) ....................................... $800.00 each
- Booths (approx. 10’ x 8’) ............................................. $1,000.00 each

For credit card transactions and prices go to our website at occcsi.org until October 10, 2017.

Mail to: Orange County CSI Chapter
Post Office Box 8899
Anaheim, CA 92812

RETURN THIS PORTION WITH YOUR CHECK

Event: Construction Products & Services Exposition 2017
October 12, 2017 - Marconi Automotive Museum & Foundation for Kids

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Holiday Party Memories 2016
Holiday Party Memories 2016

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In October, I published "Tegularity," a discussion of the proper term for acoustic ceiling panels. (The title came from the name for a specific type of panel edge.) Shortly thereafter, in December 2016, I received a question from Anthony Capkun, editor for Electrical Business Magazine and former editor for the Construction Specifier. He asked, "What is the correct term these days: a) Building Envelope or b) Building Enclosure?"

I responded that I had always used building envelope, and that is the term I hear most often. But, having learned a long time ago that always hearing a term used in a particular manner does not mean that that is the correct term, I decided to investigate further.

One of the first places I go for this type of question is Google's Ngram Viewer. This is a handy search tool that charts frequency of appearance of words or terms, based on sources printed between 1500 and 2008. Although it has its problems, it's a convenient way to get a feel for the relative uses of similar terms. In this case, the results suggest that my experience is probably common, with building envelope being used far more frequently than building enclosure.

However, in our line of work, we don't rely on popularity contests, so I turned to the experts - published standards and leaders in the subject.

I started with the National Institute of Building Sciences (NIBS), self-proclaimed "Authoritative Source of Innovative Solutions for the Built Environment." NIBS has several committees, one of which is the Building Enclosure Technology and Environment Council (BETEC). In 2004, BETEC and AIA established the Building Enclosure Council - National (BEC-N), which now has 26 chapters (BECs) in various states. BETEC has other committees, some of which use building enclosure in their titles; none use building envelope.

Next on my list was recognized guru Joe Lstiburek, PhD, PE, ASHRAE Fellow, principal at Building Science Corporation. Joe is blunt about his view. In BSI-024: Vocabulary, he said "They are building enclosures - they are not building envelopes. You put letters in an envelope not people." The same document defines only building enclosure. It has been reported that he also said, "Envelopes are for FedEx. Enclosures are for engineers." It's interesting to note that he wasn't always this certain; in 1999 he wrote a paper titled "Air Pressure and Building Envelopes."

A search of the Whole Building Design Guide shows some documents that use building envelope, while others use building enclosure. ASTM and ASHRAE use both terms, and Wiki defines building envelope only, yet has a discussion of building enclosure commissioning.

Our friends to the north have the National Building Envelope Council of Canada. As you might expect, building envelope is widely used in Canada, but building enclosure also appears. Because they've been more concerned about weather barriers than the US has, for a longer time, my initial inclination was to follow their lead. Unfortunately, Joe Lstiburek and his buddies muddled the water, deciding that building enclosure was better than building envelope.

I was not surprised to find that I was not the first to try to find the better of the two terms. In October 2012, Allison Bailes III, PhD, owner of energy vanguard, posted "Building Envelope or Building Enclosure Which Is the Better Term?" in the energy vanguard blog. After discussing the debate and stating a preference for building envelope, he ends by saying, "Both are perfectly adequate, but the existence of two terms for the same thing will create unnecessary confusion. Such is life." About a month later, he posted a follow-up titled "Building Enclosure, Not 'Building Envelope.'" In this piece, he discusses additional information and states, "Precision of language matters. The building enclosure is one of the most fundamental concepts in building science, and it does make sense to use a single term to describe it. I'm now a convert to 'building enclosure' and will use it exclusively."

I sent inquiries to a few of the standards organizations, asking if there will be an attempt to agree on a single term. Even if they do, it will take at least a couple of years to change their standards, as they would undoubtedly wait until the standards were due for updates.

As for me, I'm going to follow the lead of NIBS and Lstiburek, and use building enclosure.

© 2017, Sheldon Wolfe, RA, FCSI, CCS, CCCA, CSC

Michael Thonet is the inventor of the steam bending process first used on his famous bentwood Viennese cafe chair. His name is pronounced "Taw-net" according to Witold Rybczynski in his new book, Now I Sit Me Down, From Klismos to Plastic Chair: A Natural History. This is just one tiny piece of the fascinating history of seating presented by architect and writer Rybczynski as he takes us from three legged stools of ancient Egypt, to Chippendale, Charles & Ray Eames, Hans Wegner, the Aeron chair, the Barcolounger and finally the ubiquitous, inexpensive injection molded plastic patio chairs sold at stores like Walmart. In both high-design and no-design chairs Rybczynski recounts the influence of new materials on their design, what makes a chair comfortable or not, and provides insight to the chairs designed by famous architects.

Rybczynski starts his story with the three legged stool invented in ancient Egypt and progresses through other primitive seating developed mostly in Mediterranean countries. He distinguishes between societies that squat, or sit cross legged on the floor, and those that have a tradition of chairs and tables. The chair collections of both George Washington and Thomas Jefferson are described. The important developments in seating of the 18th Century are presented in the chairs of Englishman Thomas Chippendale and the Windsor hoop-back chairs used most famously in Philadelphia’s Independence Hall. He notes that the key factor in successful chair construction is strong joints between both the legs and the seat and the seat and the back and describes how this is achieved in various chair designs. Chairs can project the personality of the sitter as in a high backed throne or today’s executive desk chair, vs. the more casual rocking chair. It wasn’t until 1884 that careful ergonomic studies on sitting by the German Franz Staffel identified the most comfortable sitting posture, i.e. the right seat height, seat slope and hardness, the optimal slope of the back and its shape.

The chapters on the chairs designed in the late 19th and the 20th Centuries are probably of most interest to us. Thonet’s 1841 patent for steam bending wood enabled him to build very well designed, sturdy, inexpensive, and popular seating much of which is still sold today. (Charles Stendig imported Thonet’s furniture as well as furniture by other European manufacturers until the 1970s.) The #14 cafe chair was made from only six bentwood pieces and assembled with ten screws and two washers. This simplicity lent itself to assembly line manufacturing and the cafe chair was one of the first mass produced consumer items. On the other hand, the beautiful but not very comfortable Wassily chair, designed by Marcel Breuer in 1925, had to be handmade in spite of its industrial, machine made appearance. It was very expensive to manufacture as were similarly designed chairs by Corbusier and Mies van der Rohe. More recently the revolutionary molded plywood seating designed by Charles and Ray Eames in the 1940s, the "potato chip" chair, is presented. This elegant design is comfortable to sit on and efficient to manufacture. Herman Miller began manufacturing the chair in 1946 to great commercial success. Eames also made the first commercially produced plastic chair in 1950 with its single piece shell; seat, back, and arms, supported on rubber mounts attached to wire frame legs. Beginning in the 1950s the chairs of Danish cabinetmaker Hans Wegner were important to the popularity of the Danish Modern school of design. His chairs, many of which are still manufactured today, are characterized by a careful attention to comfort along with graceful lines in wood construction. His Peacock Chair is a beautiful update of the 18th Century sack-back Windsor chair.

The last chapters in the book provide fascinating detail on the development of several common chair types we use today. Among these are the folding canvas director’s chair; the baby stroller; Everest & Jenning’s 1933 wheelchair; Edward J. Barcola’s 1947 Barcoloafer, the precursor to his Barcolounger; the Swede Gillis Lundgren’s obsession with knock down, owner assembled furniture that became IKEA; the Aeron chair by Herman Miller; and finally the plastic patio chair. This was first developed in Germany in 1951 by a plastic manufacturer, not a furniture company. It is made of injection molded polypropylene less than 1/4” thick, each chair taking about one minute to manufacture. Rybczynski describes this as the "rubber flip-flop" of furniture but without the charm of a flip-flop and not suitable for either the living room or the beach. Sadly, since they are so cheap to make they are today probably the most common chair on the planet.

Now I Sit Me Down, From Klismos to Plastic Chair: A Natural History was published by Farrar, Straus and Giroux in 2016. It has 242 pages and includes the author’s thumbnail drawings of many of the chairs.

Ed Buch, CSI, CCS, AIA, LEED AP
Don't forget to mark your calendars for the 2017 CSI NW+W Bi-Region Conference in Seattle, WA!

CSI Northwest & West presents:
2017 Bi-Region Conference
May 18-20, 2017

Save the Date!

What: 2017 CSI NW+W Bi-Region Conference
When: May 18-20, 2017
Location: Seattle, Washington
Hotel: Sheraton-Seattle

AIA Educational Sessions to include the following:

1. Revit
2. Construction Management
3. Material Sciences
4. Concrete and hands on demonstrations
5. Estimators
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As well as manufacturer trade shows and tours.

More information to follow!
The September 2016 membership list report was submitted to the Orange County Chapter from CSI headquarters on December 22, 2016. We have not had clear information for a period of time due to computer issues at CSI where you send your renewal payments. We have attempted to list those of you that are continuing members in this column as a courtesy to you. As we receive future membership information from CSI, we will publish their lists.

**Renewals for September 2016**

- Danny MacNair
- David Pebley
- Joe Pebley
- Janet Piccola
- Dana Thornburg

Note from your Editor: Yes, this is a problem. For the record, my membership to the Honolulu CSI Chapter that I paid in November of 2015 was just credited to them in November of 2016.
WOLFE’S HOWL
(continued from page 5)

In 2004, the Minneapolis-St. Paul Chapter visited the school and followed the same program. It’s easy to complain about what architects don’t know, but they are not alone. Specifiers may know more of the technical properties of materials, but many have had no more practical experience in construction than architects.

I used masonry as an example, but similar programs could be done for everything that goes into a building. All of us can do better if we know more about how other team members do their jobs.

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Agree? Disagree? Leave your comments at http://swspecificthoughts.blogspot.com/

WREN’S WESTERN OUTPUT
(continued from page 4)

powerful way!

CSI “The Way We Were” and “The Way We Are” is a trade association with a unique membership. CSI members are from many disciplines. CSI members that continue their membership have found value. Who successfully gets members to join? The chapters. Who enables the members to renew their membership? The chapters. Who keeps CSI a vibrant group? The chapters. Who attracts generations of family members to join CSI and remain CSI members? The chapters. Where do most CSI members go to receive information, education and resources? The chapters! Amen!

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CPSE 2016 EXHIBITORS
(continued from page 6)

Siena Tile & Stone Installation Products offers an exceptional full line of high quality products for all your tile and stone installation needs, including our high-quality Mortars, Exceptional Epoxy, Sanded, and Non-Sanded Grouts in 36 brilliant colors. Dragon Skin our incredible waterproofing and crack isolation membrane, sealf levelinig and elastomeric underlayments, adhevises, admixtures and more... Visit SienaProducts.com and access our helpful Siena “Materials Calculator” to specify all materials your project will need. Demand the Very Best Products with superior strength and superior quality... Demand Siena Tile & Stone Installation Products!!! Contact info: Christine Camponovo, Director of Sales and Marketing, Siena Tile & Stone Installation Products, SienaProducts.com, Mobile: 951.990.8553, email: ccamponovo@omega-products.com

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Ads should be submitted as camera ready art. If on disc, the format should be Adobe Illustrator or Photo shop. To purchase an ad space please contact Dana Thomburg, CSI (800) 600-6634
MEETING SCHEDULE AND INFORMATION
Make reservations by the Friday preceding the meeting.
Call the Chapter Hotline at (714) 434-9909

UPCOMING MEETINGS:

January 10  OCCCSI Board Meeting (5:30 P.M.)
Thompson’s Design Center
1716 Case Road
Orange, California

January 25, 2017  Annual Joint Meeting with LACSI
Marriott Courtyard Hotel
500 East 1st Street
Long Beach, California 90802

February 1  Newsletter Deadline

February 21  OCCCSI Board Meeting (4:30 P.M.)
Phoenix Club
1340 S. Sanderson Avenue
Anaheim, California

February 21  OCCCSI Membership Meeting
Phoenix Club
1340 S. Sanderson Avenue
Anaheim, California