



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.lacsi.org.

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

BOARD OF DIRECTORS

President	Bryan Stanley, CSI	(714) 221-5520
President-Elect	Dana Thornburg, CSI	(800) 600-6634
Vice President	Michael Granatowski, CSI	(949) 212-2363
Treasurer	Gary M. Kehrier, CSI, CDT	(949) 589-0997
Secretary	Joseph Esquer, CSI	(657) 212-0111
Professional Director	Sean Connolly, CSI, CCS, RA, RCI	(650) 521-3499
Professional Director	Trevor Resurreccion, Esq., CSI, CDT	(949) 837-8200
Professional Director	David Jordan Smith, CSI, AIA	(949) 250-0880
Industry Director	Lisa Chocek Fyke, CSI	(714) 319-7058
Industry Director	Thomas Domenici CSI, CTC	(714) 270-9756
Industry Director	Annette Wren, FCSI, CDT	(562) 592-3187
Advisor/Past President	David C. Brown, CSI, CCS	(714) 329-8498

Website: www.occcsi.org

OCCCSI CREDIT CARD USE POLICY

The OCCCSI Board of Directors has a fiduciary responsibility to all of its members. Those members and others who choose to purchase events or opportunities by check or cash will receive a discount. Discounted prices will appear in the newsletter and PDF announcements via emails. Those who choose to use their credit cards will be able to purchase at the price printed on our website, occcsi.org. Credit card transactions must be made by the printed deadline in the newsletter or in person at monthly meeting events. Credit card purchase for CPSE trade show registration and exhibit space will NOT be accepted the day of the trade show. This policy is effective on April 8, 2014 by Board approval.

Key aspects of our privacy policy for credit card transactions include:

- We never sell, share, trade, or disclose any of your personal information.
- We use a credit card processing company to bill users for events and opportunities. Our credit card processing company is not authorized to retain, share, store, or use your personal information.
- We require the entry of only enough information about you to process your transaction.

See our website, occcsi.org, for further disclaimer information.

The **Orange Peel** is published bi-monthly by the Orange County Chapter of the Construction Specifications Institute and is mailed to all Chapter members and other selected CSI members nationwide. Inclusion of articles, announcements, business cards, advertisements and similar information does not necessarily imply endorsement thereof by CSI, OCCCSI or the Newsletter staff.

Co-Editor.....Annette Wren, FCSI, CDT
 Co-Editor.....Gary Kehrier, CSI, CDT
 Assistant Editor.....Sean Connolly, RA, CSI, CCS
 Copyright 2017, Orange County Chapter of Construction Specifications Institute.
 All rights reserved.

IN THIS ISSUE

President's Message.....	3
Wren's Western Output.....	4
Wolfe's Howl.....	5
Learn about our CPSE 2016 Exhibitors.....	6
February Membership Meeting.....	7
CPSE 2017.....	8
Holiday Party Memories.....	9
Wolfe's Howl.....	11
Buch Notes.....	12
OC News Flash.....	14
Calendar.....	16

COMMITTEE CHAIRS

Academic Affairs	Trevor Resurreccion, Esq. CSI, CDT (949) 837-8200
Advertising	Dana Thornburg, CSI (800) 600-6634
Awards	Gary M. Kehrier, CSI, CDT (949) 589-0997
Budget	Annette Wren, FCSI, CDT (562) 592-3187
Certification	David A. Karina, CSI, RCI, ACIA (714) 960-7785
Education	David A. Karina, CSI, RCI, ACIA (714) 960-7785
Long Range Planning	Gary M. Kehrier, CSI, CDT (949) 589-0997
Membership	Joseph Esquer, CSI (657) 212-0111
Newsletter	Annette Wren, FCSI, CDT (562) 592-3187
Product Show	David C. Brown, CSI, CCS (714) 329-8498
Programs	David Jordan Smith, CSI, AIA (949) 250-0880
Roster	Catherine Sturgeon (714) 342-0290
Website	Cheryl Hanna (714) 325-2587

SAVE THE DATE

FEBRUARY 21, 2017

2017 MCGRAW-HILL
 CONSTRUCTION OUTLOOK

THE PRESIDENT'S MESSAGE

Bryan Stanley, CSI



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 Kwansaa. Or you are just happy you made it to 2017.

So what could I write about? Something in the spirit of Christmas? “A Charley 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!!”

WOLFE'S HOWL

By Sheldon Wolfe, RA, FCSI, CCS, CCCA, CSC

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.

Get Your Hands Dirty!

(continued on page 15)

AFFORDABLE & ELEGANT
Limestone Products and More!
 Innovative Designs with
 Amazing Natural Limestone Appearance

Bring us your vision or plans and we'll make them a reality!

Pre-cast fireplace surrounds
Architectural Shapes
Columns
Balustrades
Shutters

Foam Concepts, Inc. has been designing and manufacturing "Architectural Shapes" since 1989 and with our unique expertise, we are able to service all sectors of the building industry. From weekend projects by homeowners to extensive work on jobs like the Santa Anita Mall to Elegant designs on Luxury Homes. **Foam Concepts, Inc.** manufactures and delivers superior quality products with an exceptional customer experience.

(714) 693-1037

Foam Concepts, Inc. 4729 E. Wesley Dr. Anaheim, CA 92807
www.foamconcepts.net

OUR PAST PRESIDENTS

* Lynn Muir, CSI	1965-1967	(* deceased)
* Howard Beal, CSI	1967-1968	
* Carl Carlson, CSI	1968-1969	
* Robert Hernandez, CSI	1969-1971	
* Lloyd Schumann, CSI	1971-1973	
* Howard Dedrick, CSI	1973-1975	
Bill Sharp, CSI	1975-1976	
* George Daws, CSI	1976-1977	
* Malcolm Lowe, CSI	1977-1979	
Frank Dave, CSI	1979-1980	
James LeNeve, CSI	1980-1981	
Mike Geraghty, CSI	1981-1983	
Annette Wren, FCSI, CDT	1983-1985	
David Lorenzini, FCSI, CCS	1985-1986	
* Mike Lytle, CSI	1986-1988	
Richard Carrasco, CSI, CCS	1988-1989	
* Dell Criger, CSI	1989-1991	
Gerald Staake, CSI, CCS	1991-1993	
John Regener, CSI, CCS, CCCA	1993-1995	
Jackie Carr, CSI	1995-1996	
Kimberly Claus, CSI	1996-1997	
* Ed Brannen, CSI	1997-1998	
Pete Thomsen, CSI	1998-1999	
Royce A. Wise, CSI, CCS	1999-2001	
Mark H. Niese, CSI, CDT	2001-2003	
Gary M. Kehrier, CSI, CDT	2003-2006	
Mark H. Niese, CSI, CDT	2006-2008	
Michael D. Baker, CSI	2008-2010	
Steven Olitsky, AIA, CSI, CCS, RA	2010-2012	
Michael D. Baker, CSI	2012-2013	
David C. Brown, CSI, CCS	2013-2015	

The Art of Stucco Wall Systems by Omega



ONE COAT • THREE COAT • EIFS SYSTEMS

Dana Thornburg, CSI
National Architectural Rep.
Cell: 714.907.3981
dthornburg@omega-products.com

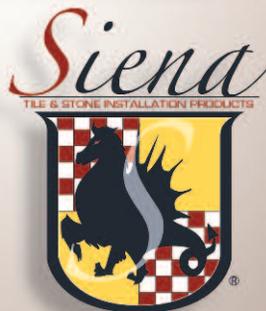
omega-products.com

TAKING TILE & STONE INSTALLATION PRODUCTS FROM ORDINARY TO EXTRAORDINARY



We offer the complete system:

- MORTARS
- GROUTS
- UNDERLAYMENTS
- PENETRATING SEALERS
- ADMIXTURES
- CAULKING
- WATERPROOFING
- ANTI-FRACTURE



Manufactured by
Omega Products International

Christine Camponovo, CSI
Sales and Marketing Director
Cell: 951.990.8553
ccamponovo@omega-products.com

SienaProducts.com

CPSE 2016 EXHIBITORS

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!

L2 Specialties provides and installs "Flexible Space Innovation with Interior Motives" throughout Southern California. We provide turnkey support for Moderco Operable Wall and Acoustic Glass Systems, with finishes for every application. We also provide Klein Sliding Glass and Panoramic office solutions. Our service and focus on operable glass is unmatched, specifications – keynotes – layout – budgets – structural details – installation. Contact: Charles Joslin, CSI directly at 714-721-0380 or Charlesj@L2Specialties.com

WESTERN WALL & CEILING CONTRACTORS ASSOCIATION / TECHNICAL SERVICES INFORMATION BUREAU:

The "TSIB" is the technical arm of the Western Walls & Ceilings Contractors Association (WWCCA) serving the communities of Southern California, Southern Nevada, Arizona, Colorado, New Mexico and Utah. WWCCA is the oldest (established in 1901) wall & ceiling association in the West. The success of the association can be attributed to our ability to develop loyal and close relationships with contractors, building code officials, architects, engineers and other industry groups that are unparalleled in the wall and ceiling industry. The technical information gathered by TSIB has been generated through correspondence, educational programs, technical papers and dissemination of industry technical codes and standards. CONTACT: BRYAN STANLEY CSI (714) 221-5530; bryan@tsib.org. TECHNICAL ADVISOR & OCCSI PRODUCT SHOW CHAIR.

ORCO Block Company, Inc.: With over 60 years of service in Southern California, ORCO Block Co., Inc. is a leading manufacturer of concrete masonry units, specialty mortars, paving stones, and mortarless wall systems. With facilities located throughout the Southern California region, ORCO has earned the reputation for high quality, outstanding customer service, and leadership in environmentally responsive solutions. We are dedicated to serve you and earn your business. Contact: Alexis Roth, Architectural Representative; 11100 Beach Blvd., Stanton, CA 90680; alexis.roth@orco.com|www.orco.com; (714) 527-2239 office; (714) 932-7125 cell; (714) 897-1904 fax.

Tnemec: Since 1921, Tnemec has been manufacturing High Performance Coatings for all surfaces and projects ranging from Commercial, Institutional, Industrial, Sports and Recreational etc. Choose any substrate in any environment, no matter how extreme, ordinary paint won't stay in the game, but not with Tnemec. Tnemec sales representatives are actually coating consultants. They'll answer all your questions, know what questions to ask, clarify a specification or even help write, making sure everything is right long before any coating is applied. When long term performance and aesthetics are a must, the answer is Tnemec. Contact: Tony Hobbs, Tnemec Representative; Tel # 310-804-2326; and website www.tnemec.com

Omega Products International Corporation prides itself on being a leader in the construction industry. The Omega line of products includes three-coat stucco, one coat, EIFS, acrylic finishes and related products. Our Valentino products are high-end acrylics and lime-based finishes, including true Venetian Plasters. With state of the art manufacturing facilities, unsurpassed quality control and exceptional service, Omega Products has been the professional's choice for over 35 years. For Omega Products call Pete Thomsen at (714) 240-5799 or Dana Thornburg at (714) 907-3981.

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 OCCCSI 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 OCCCSI 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 occsi.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**

Amount Paid:\$_____

Contact Name: _____

Company Name: _____

Address: _____

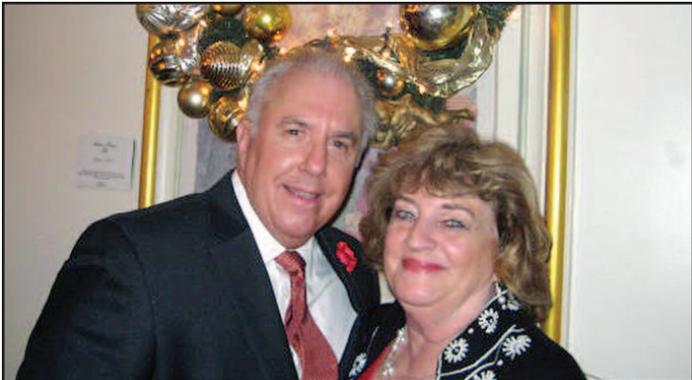
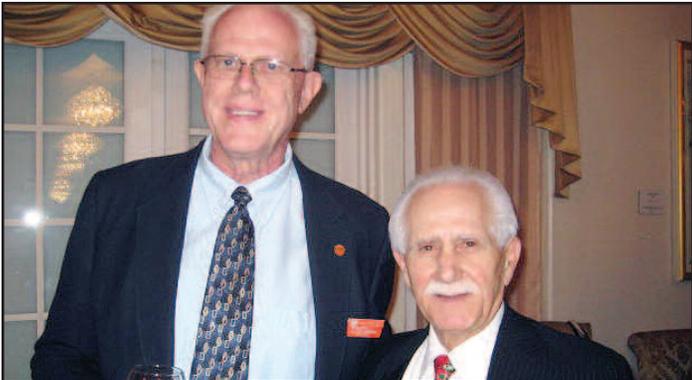
City, State, Zip: _____

Phone Number: _____

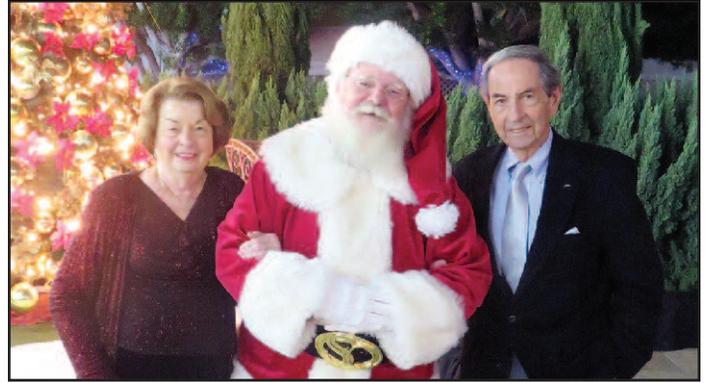
Fax Number: _____

E-mail Address: _____

Holiday Party Memories 2016



Holiday Party Memories 2016



Thank You to Our Sponsors!

Santa & Carolers:

DPBE - David Brown

The Dessert:

Behr Paint

CENTRIA

Draper

KG Global Architectural Marketing Group, Inc.

Mapei

Omega Product International Corporation

Structawire

The UPI Group of Companies

Vista Paint

Woodwork Institute

WOLFE'S HOWL

By Sheldon Wolfe, RA, FCSI,
CCS, CCCA, CSC

Building envelope - or building enclosure?

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?"

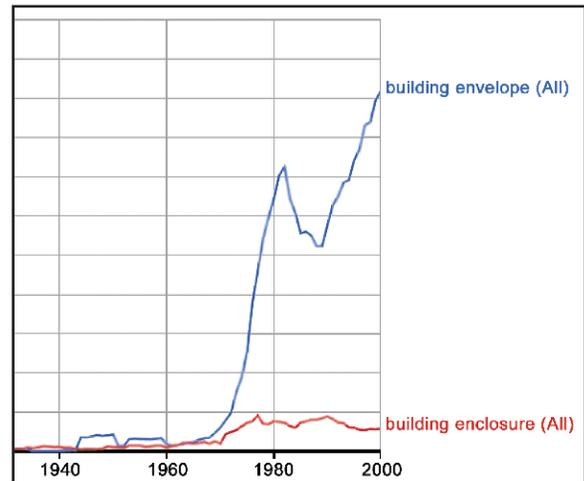
I responded that I had always used building envelope, and that that is the term I hear most often. But, having learned a long time ago that always hearing a term used in a particular manner does not mean that that is the correct term, I decided to investigate further.

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 muddied 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
Agree? Disagree? Leave your comments at
<http://swspecifichthoughts.blogspot.com/2016/10/tegularity.html>

BUCH NOTES

By Ed Buch, CSI, CCS, AIA,
LEED AP

Now I Sit Me Down

Michael Thonet is the inventor of the steam bending process first used on his famous bentwood Viennese cafe chair. His name is pronounced "Tawn-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 & Jennings' 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
6. NW Day and Sustainability

As well as manufacturer trade shows and tours.

More information to follow!



Tom Domenici
 CTC, CSI, C54
 Area Technical Manager

H.B. Fuller Construction Products Inc.
 16421 Phoebe Avenue
 La Mirada, CA 90638

www.hbfuller-cp.com

Office 714.465.2304
 Cell 714.270-9756
 Fax 714.465.2304
 Email tom.domenici@hbfuller.com

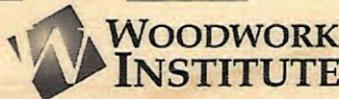
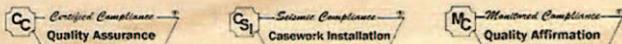


Jerry L. Pozo, CSI, CDT, BS

Divisions 3-4-9
 Technical Specifications Consultant

BMI PRODUCTS

No. California: 990 Ames Ave · Milpitas, CA 95035
 So. California: 12767 Imperial Hwy · Santa Fe Springs, CA 90670
 Office: 530-885-6828 · Cell: 408-595-2031 · Fax: 408-293-4103
 pozo.jerry@us.sika.com
 www.bmi-products.com · www.usa.sika.com



P.O. Box 980247 · West Sacramento, CA 95798-0247 · (916) 372-9943

MARCIA FALK, CSI, CDT
 Director of Architectural Services

Cell (916) 214-9334 · Office/Fax (909) 803-8043
 P.O. Box 252 · Etiwanda, CA 91739-0252
 marcia@woodinst.com · www.woodworkinstitute.com



KATHY GREENWAY, CSI, CDT
 Regional Sales Manager
 SouthWest Architectural Sales
 E-mail: kgreenway@draperinc.com
 Mobile: 714.396.9732
 Toll-Free: 866.987.7999, Ext. 3101



In California, d/b/a
 DRAPER Shade & Screen Co., Inc.
 151 N. Kraemer Blvd., Suite 101
 Placentia, CA 92870
 Fax: 714.577.0044

411 S. Pearl St., Spiceland, IN 47385 USA ■ www.draperinc.com

OC NEWS FLASH

Membership

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.



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!

© 2017 Annette Wren, FCSI, CDT

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.

© 2016, Sheldon Wolfe, RA, FCSI, CCS, CCCA, CSC
Agree? Disagree? Leave your comments at
<http://swwspecifichoughts.blogspot.com/>

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, self leveling and elastomeric underlayments, adhesives, 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

MASCO | Coatings Group

Janet "Jan" Piccola FCSI | National Account Manager

jpicola@behr.com
Tel 714.545.7101 ext. 2435 | Fax 714.241.1002
Cel 714.679.5730

3400 W. Segerstrom Avenue
Santa Ana, CA 92704
behr.com



Mike Granatowski

National Architectural Manager

mgranatowski@mapei.com
Cell: (949) 212-2363



MAPEI Corporation

5415 Industrial Parkway, San Bernardino, CA 92806
Fax: (949) 361-8754
Website: www.mapei.com



FORGIONE SALES INCORPORATED

Architectural Products & Services

FRANK FORGIONE, CSI

Phone: 714.693.9890
Fax: 714.693.9898
Cell: 714.478.2312
Email: Frank@Forgionesales.com



ADVERTISING RATES

Business Card Size Ad	\$250.00
Double Card Size Ad	\$350.00
Quarter Page Size Ad	\$450.00

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 Thornburg, CSI (800) 600-6634



ORANGE PEAL



(714) 434-9909 (Chapter Hotline)

www.occcsi.org

OCCCSI

Post Office Box 8899
Anaheim, CA 92812

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

