



Construction Specifications Canada is an organization representing diverse interests in the construction industry and related professions. It is dedicated to improving the quality and flow of information between these interests, whether in the form of specifications, contract administration or marketing.

May 2021 Edition

Editor: Tracey Stawnichy



In This Edition...

Executive List	2
Chair's Message	3
Membership.....	3-4
Education.....	4-5
'We Are Sitting on a Goldmine of Renewable Energy'.....	6-7
Two Years Later, Here's the Latest With Notre Dame's Restoration.....	7-9
Meet the Vertical Automated Grocery Store.....	9-11
NASA Partners With 17 Companies to Invest in the Future of Urban Air Mobility.....	11-12
Psychology of Space: How Interiors Impact our Behavior.....	13-14
Association Links and Liaisons.....	14-15
The Bulletin Board	16
The Executive	17

Thursday, May 20, 2021; Noon – 1pm

CSC Edmonton Chapter 2021 ACM (Members Only)

We welcome all Chapter members to attend our second online Annual Chapter Meeting. As a member you will have the opportunity to learn of the initiatives and accomplishments the Chapter has done in the past year and meet the upcoming Chapter Executive.

Those in attendance will be entered into a draw for 2 rounds of golf (you and a guest, or you can go by yourself twice!) at a local golf course to be named at the ACM. Don't forget to register!

A Zoom meeting invitation, along with the agenda, will be sent out on May 19, 2021.

The Edmonton Chapter Executive looks forward to virtually seeing everyone soon!

<https://www.eventbrite.ca/e/csc-edmonton-chapter-2021-acm-tickets-152366246545>

Visit our website for more information!

<http://edmonton-csc.dcc.ca>



2020 / 2021 Edmonton Chapter Executive		
Director	Tracey Stawnichy	780 994 3699
Chairman	Andrew Brassington	587 341 5268
Vice-Chairman	Dylan Leclair	587 335 9552
Secretary	Jessica Prosser	587 340 7169
Treasurer	Catherine Osborne	780 486 6400
Architect	Kevin Osborne	780 717 1007
Chapter Liaison	Position Open	
Education	Mike Ewaskiw	780 237 7844
Engineer	Jamie Murphy	780 983 0288
General Contractor	Renee McKenzie	780 717 7798
Interior Design	Corry Bent	780 995 1647
Manufacturer/Supplier	Mike Lafontaine	780 907 4920
Marketing, Promotion, and Communications	Position Open	
Membership	Joseph Trivellin	587 785 6484
Newsletter	Tracey Stawnichy	780 994 3699
Specifications	David Watson	780 758 4147
Website Administrator	David Watson	780 758 4147
Trade Contractor	Position Open	
Program	Kyla Keller	780 643 3233
	Jessica Prosser	587 340 7169
Owner's Rep	Cam Munro	780 231 1739
Sustainability	Position Open	
At Large	Dave Lawrence	780 901 7260

Advertising Rates
Business Card: April 1 to May 30 Rates cover your ad on our website 24 hours per day, 7 days per week. Business card on-line: Annual \$100 if received by May 1; \$75 if received by August 1; \$50 if received by November 1; \$25 if received by February 1 Add \$50 to have a link to your company web site from the CSC Edmonton Chapter web page.

Chapter Sponsor
New Chapter Sponsor Bundles: edmonton.csc-dcc.ca/About+Us/Sponsor+Opportunities+-+CSC+Edmonton+Chapter/

Student Sponsor

Meeting Sponsor
\$50 for Individual (personal) Sponsor \$250 for Corporate Sponsor

FOR FURTHER INFORMATION

Contact any member of the Executive, attend one of our Chapter Meetings, send your name and address to CSC Edmonton Chapter, PO Box 35093 Mid Town PO. Edmonton, AB T5J 0B7, or go to edmonton.csc-dcc.ca for additional contact information.

GOALS OF CSC

Construction Specifications Canada is a multi-disciplinary non-profit association dedicated to the improvement of communication, contract documentation, and technical information in the Construction Industry. CSC is a national Association with Chapters in most major Canadian Cities.

To this end, CSC pursues the study of systems and procedures that will improve the coordination and dissemination of information relevant to the construction process.

We seek to enhance the quality of the design and management aspects of the construction activity through programs of publication, education, and professional development, believing that by so doing, we can contribute best to the efficiency and effectiveness of the construction industry as a whole.

OBJECTIVES OF CSC

To foster the interest of those who are engaged in or who are affected by the compilation or use any forms of specifications for the construction industry.

To publish literature pertaining to the construction industry.

To engage in activities to improve procedures and techniques related to the construction industry.

The opinions and comments expressed by the authors do not necessarily reflect the official views of Construction Specifications Canada. Also, appearance of advertisements and new product or service information does not constitute an endorsement of those featured products or services.

Announcements:

SAVE THE DATE: Annual Chapter Meeting (ACM) Tuesday, May 4, 2021; Noon – 1:00pm

Chair's Message



Andrew Brassington, CSC Edmonton | Chapter Chair

Hello Chapter Members,

Wow, I did not know I would have to do so many of these without actually seeing you all. As a community, we must channel strength and support one another through this challenging time. We have our ACM this month. For all those in attendance they will be entered into a draw to for 2 rounds (you and a guest, or you can go by yourself twice...) at a local golf course to be named at the ACM – so register, and I look forward to seeing you virtual at the event.

Have a wonderful month!"

Membership in CSC

Joseph Trivellin, CTR



In the construction industry's fast-paced environment, the need for and value of Construction Specifications Canada is greater than ever. CSC brings together individuals from all segments of the construction industry. All who have a vested interest in Canada's largest industry are invited to join CSC. When you join CSC, you become part of the only association that brings together professionals from all aspects of the construction industry.

DESIGN TEAM

CSC offers members of the Design Team the opportunity to meet with other members and exchange information. It also affords you the chance to help improve technology and its management, and the means to improve ways in which your ideals are translated into clear, concise, and complete documentation.

BUILDING TEAM

If you are a member of the Building Team, CSC offers you the opportunity to become involved in formulating specifications. Your valuable input into the programs can help generate time and cost savings, as well as improve performance.

SUPPLY TEAM

The multi-disciplinary composition of CSC allows members of the Supply Team to meet with other members of the construction team. CSC programs in data filing and information retrieval are geared to present convenient and concise information on your products for proper evaluation and specification.

THE STUDENT

If you are a student of architecture, engineering, or construction technology, CSC will provide you with a greater exposure to, and a better understanding of, the construction industry, giving you an excellent opportunity if you plan a career in the construction field.

People and Places – Welcome to our new CSC Edmonton Chapter Members!

Fresh Faces (New Members)

None this month.

Yes, We've Moved (Contact / Mailing Address Update)

None this month.

Previous Members Re-Joining / Re-Activated

None this month.

CSC Education:

Mike Ewaskiw, CTR



Principles of Construction Documentation

The PCD course is an introductory course that will enable the student to have a better understanding of construction documentation (specifications, drawings, and schedules), products, bidding procedures, and contracts. **It is also a prerequisite to all the other CSC education courses.**

Specifier 1

Specifier 1 is an intermediate level course that will take the individual beyond the concepts previously introduced in the PCD Course. Although some of the same topics are included, the depth of comprehension and explanation exceed that of the PCD course. The Specifier 1 is a prerequisite for the Certified Specification Practitioner (CSP) designation from CSC. Successful completion of the course may be credited toward the experience component requirements for the Registered Specification Writer (RSW) designation.

Technical Representative

The TR course provides a better understanding of contract documents and bidding procedures, product representation, professionalism, and ethics, and will provide a new depth of understanding and explanation of concepts beyond what was previously introduced in the PCD course. The course is designed for the individual involved in the supply section of the construction industry, such as manufacturer representatives, agents, or distributors of products. The student will have successfully completed the PCD course.

Contact Mike for all your education needs.

Mike Ewaskiw, CTR, Manager
Architectural & Engineering Services
P: 780-237-7844 E: mewaskiw@stonhard.com

EDUCATION COURSES

Upcoming Classes:

- [Principals of Construction Documentation \(PCD\)](#) – TBD
- [Specifier](#) – TBD
- [Construction Contract Administration \(CCA\)](#) – TBD
- [Technical Representative \(TR\)](#) – TBD

Upcoming Classes Online:

[Principles of Construction Documentation \(PCD\)](#) – TBD
[Technical Representative \(TR\)](#) – TBD

Upcoming Workshops:

[Principles of Construction Documentation \(PCD\) 5 Day Workshop](#) – January 15, 2021 (5 weeks)
[Construction Contract Administration \(CCA\) 5 Day Workshop](#) – January 15, 2021 (5 weeks) /
March 5, 2021 (5 weeks)
[Specifier \(SP\) 7 Day Workshop](#) – February 22, 2021 (7 weeks)
[Technical Representative \(TR\) 5 Day Workshop](#) – February 26, 2021 (5 weeks)

Social Media:

Check us out:



Articles of Interest

‘We Are Sitting On a Goldmine of Renewable Energy’: SFU Policy Expert

Sourced from: <https://canada.constructconnect.com> / Russell Hixson



PROVINCE OF BC – An aerial photograph shows the future site of the Clarke Lake Geothermal Project near Fort Nelson, BC. Experts believe similar projects could help Western Canada reach its climate goals and future energy demand if given enough support from government.

The future of reaching BC’s looming energy needs could be sitting underneath our feet – and no, it’s not oil.

Andy Hira, a political science professor at Simon Fraser University in Burnaby, B.C., believes geothermal energy is being massively overlooked in B.C. and even Alberta. But as Hira argues in a recent working paper, the geothermal industry is still in its infancy and will need significant support from government to get off the ground.

Overlooked

“I think it is a chicken and the egg problem,” explained Hira. “We don’t really have the research and development or private sector infrastructure to really support geothermal. And nobody is advocating for it in an effective way.”

He added this is made worse by the fact that Site C is hogging all of BC Hydro’s fiscal room and attention, leaving little left over for other things. In 2019 BC Hydro scrapped its Standing Offer program which encouraged renewable energy projects by purchasing power from them. Hira believes this could be a major mistake as research in his paper shows a looming demand challenge even after Site C is up running.

“Site C really is going to be inadequate in about 10 years if we reach the projected energy demand

required for the electrification of things like cars and LNG facilities,” he said. “It is clear that we are going to need a mixture of different renewables.”

Deeply Good

Hira explained unlike other renewables, like wind or solar, geothermal does not have intermittency issues making it uniquely attractive. They also can operate in harsh environments, generate zero emissions and take up almost no above ground space.

Hira noted B.C. and Alberta’s expertise in oil and gas drilling could be ported over into drilling geothermal wells. It’s also possible to transform abandoned oil and gas well sites into geothermal sites. Hira says government incentives and subsidies are needed to de-risk the early work and spur innovation.

“For example, California provides no-risk loans to those searching for wells or fields and if they strike it rich the loan is paid back, but if not it is forgiven,” said Hira. “We have nothing like that in Canada.”

He believes similar incentives in Canada for electrification and direct heating/cooling could improve risk and generate investment. Hira also noted geothermal could address power issues for remote and Indigenous communities.

“The government could support the development of geothermal sites for First Nations and remote communities,” he said. “We have an appalling situation where more than 100 remote communities rely on diesel because of intermittency issues.”

Lead or Follow

Hira said parts of the U.S., the Philippines and Scandinavian countries are already developing their geothermal industries.

“The timing is right,” said Hira. “There are buds shooting out from the ground, consulting companies are rising, we see a new president down south who is turning his attention to climate change and clean tech. Now is our window of opportunity to grow world-class companies. Our own resources could be our proving ground.”

But Hira said this requires large injections of capital, an issue that has already held up a handful of geothermal energy projects in Canada.

“If we sit on our hands, we will miss the opportunity and have multinationals do the work for us,” he said.

Hira wrote the paper with Willow Grove Research Associate at the SFU Pacific Water Research Centre Nastaran Arianpoo. It is available here:

<https://www.sfu.ca/content/dam/sfu/politics/CERG/CERGResources/CERG%20WP%204%20A%20Case%20for%20Geothermal%20Power%20in%20British%20Columbia%20Mar%2015%2021.pdf>.

Two Years Later, Here’s the Latest With Notre-Dame’s Restoration

Sourced from: <https://www.architecturaldigest.com> / Nadja Sayej

The world watched on as the church’s spire fell on April 15, 2019, after a fire destroyed the centuries-old landmark. Now, two years later, the church is still going through a massive restoration. This jewel of Gothic architecture is being rebuilt with oak trees from local forests, as 200 construction workers operate on-site every day. The goal, according to French president Emmanuel Macron, is to have the church repaired before the city hosts the 2024 Summer Olympics, which is slated to begin on July 26, 2024, in Paris. But is that a realistic goal?



Two years after the horrific fire engulfed Notre-Dame, the long restoration process continues. Photo: Alexis Komenda

The first step for Notre-Dame's roof and spire reconstruction was the safety phase, which started in the summer of 2019 and lasted until November 2020. Scaffolding was built around the cathedral to restore the spire, tarp was installed above the vaults, gargoyles were wrapped, and the flying buttresses were reinforced. Construction continued until the pandemic hit. There was a three-month pause of the reconstruction in early 2020, but construction resumed June 8, 2020, with workers removing more than 300 tons of burned scaffolding that surrounded the spire, which took until December 2020.

To remove the scorched scaffolding on the roof, a secondary structure of metal beams was built on three levels to help prevent the collapse of the church. Workers dangled on ropes to access the heart of the scaffolding.

The latest update from Notre-Dame is that all the burned timbers were removed. "We've made great progress in the past month, it's very encouraging," says Picaud. "When I last visited the church, I saw one of the biggest steps: installing scaffolding inside the cathedral."

The church is depending on donations through the fundraising organization and won't have a ticketing system once it reopens (it will remain free entry). "It's difficult, as you imagine, there's so much to do," says Picaud, who is planning a virtual event with the French Embassy to the U.S. on April 15 at 12 p.m. EST, with a presentation and status update about the restoration.

Today, there is still a hole on top of the church. They're also building a replica of the church's spire that was initially designed by 19th-century architect Eugène Viollet-le-Duc, made of more than 1,000 donated oak trees from public and private forests from all over France. The trees are being cut and collected this spring before they sap and will be stored for 12 to 18 months to prepare them for the reconstruction phase, starting fall of 2022.

The goal is to store the wood at a low humidity level (below 30%). Each tree must be long enough to fit an overhead curve of 65 feet long to restore the roof's framework (its nave and choir). Some of the

trees are over 200 years old, according to Bertrand Munch, the director general of the National Forestry Office.

It's slow progress, but the team of engineers, carpenters, and construction workers remains hopeful. "The selection of these first oaks trees is an important step on the road to the rebirth of the cathedral," says Dominique Jarlier, president of the National Federation of Forestry Municipalities. "It's part of a huge transformation." But with all the hard work and determination, it appears the wait will be worth it.

Meet the Vertical Automated Grocery Store

Sourced from: <https://www.constructiondive.com> / Jeff Wells



Courtesy of Urbx/The Craft

Boston-based Urbx's futuristic stores will cost between \$5 million and \$7 million to build.

Building a fully automated grocery store is certainly an eye-catching idea right now, but it's also prohibitively expensive for most startups. In addition to pricey robotics and other hardware, real estate costs can balloon into the millions of dollars in urban neighborhoods that have the population density and income levels to support such a model.

That's why Lincoln Cavalieri wants to build vertically. He's the co-founder of Urbx, a startup that's planning to build a grocery store with an automated fulfillment system attached to it that reaches up to 150 feet high and can squeeze into as little as 1,800 square feet of space.

Urbx Market, as it's being called for now, will focus on filling e-commerce orders to the many consumers that live around its stores, the first of which is slated to be built in Boston by the end of next year. Pickup orders and e-bike deliveries will get orders to shoppers within an hour. There will also be a small storefront where shoppers can order using kiosks, or with their phones, and robots will bring their orders out to them within minutes. Order picking and packing will happen in a basement level, furthering the focus on vertical alignment.

Cavalieri said the store will cost between \$5 million and \$7 million to build – roughly the same cost to construct a Whole Foods, he said, but with lower real estate costs and higher e-commerce productivity.

"I think the whole process of how a grocery store is laid out is going to change significantly in the future, and it's going to be driven by e-commerce," he said.

Operating small, automated grocery fulfillment in a densely populated urban market isn't a new concept. But being able to stack the hardware numerous stories high promises to alleviate at least some of the cost pressures that make urban e-commerce so tricky. Urbx's system uses robots that travel vertically and horizontally along fixed tracks, and incorporates predictive picking software to optimize their routes.



Instead of product aisles and service departments, Urbx Market will feature ordering kiosks, with robots delivering goods within minutes. (courtesy of Urbx)

The retail concept is similar to other "store of the future" projects like Alert Innovation's Novastore and Local Solutions' Omni-Store that combine e-commerce-focused automation with on-site shopping. One key difference with Urbx is that there won't be any product aisles to roam or service departments to visit.

Urbx hopes to eventually open thousands of urban markets. In the meantime, the company is focused on integrating its fulfillment technology with grocery retailers and scaling up as a service provider. Cavalieri said Urbx plans to announce pilots with a few grocers in the coming months along with Series A funding. The firm also plans to double its workforce of 10, which currently includes veterans from Amazon and iRobot.

Offering automated micro-fulfillment brings Urbx into an increasingly crowded field that includes Fabric, Takeoff Technologies, AutoStore, Dematic and other providers. Cavalieri said his company stands out with its vertical approach as well as speed of fulfillment. Its dual-robot system, which he likened to small elevators speeding along x and y axes, can retrieve a large order's worth of goods in around two minutes. By the numbers, Cavalieri said Urbx's system can retrieve 50 items in 135 seconds. The company's tower bots, which move vertically, travel at a max speed of 26 feet per second, while the grid bots, which move horizontally, max out at 13 feet per second.

Cavalieri said the company's system, which incorporates chilled, frozen and ambient storage temperatures, works best in standalone locations as opposed to integrating into the back of a store.

Urbx's dual-robot fulfillment system can retrieve 50 items in 135 seconds. (courtesy of Urbx)



Cavalieri said Urbx's vertical approach to fulfillment was born out of necessity. He started the company with a vision for an Instacart-like concept that would offer last-mile fulfillment and storage of grocery products. The patch of real estate they targeted in Boston's Back Bay area, however, was too small to hold all the items they wanted to carry. They knew they needed to build up.

"There wasn't a system out there that allowed us to go 100 feet in the air," Cavalieri said.

In theory at least, Urbx's omnichannel model is well-positioned for a post-pandemic world where e-commerce takes up a larger portion of grocery shopping but where consumers still want to venture to stores. It remains to be seen, though, if that same appeal holds true for a store that only offers shopping at kiosks, and that will face competition from the likes of Amazon Fresh,

Target and other well-funded competitors also targeting urban markets.

For now, the company offers a futuristic model for urban retailing and fulfillment. And it comes as companies test out a variety of automated, unmanned service models, from pickup kiosks to driverless vehicle delivery.

"Over the next five to ten years, there's going to be a pretty rapid transformation in terms of how we shop at grocery and big box retailers. I think the trend to automation is going to happen rather quickly, and I think it's going to be the dominant trend moving forward," Cavalieri said.

NASA Partners With 17 Companies to Invest in the Future of Urban Air Mobility

Sourced From: Sourced from: <https://www.archpaper.com> / Shane Reiner-Roth

The concept of the flying car has lived in the popular imagination ever since the Space Age of the 1950s, yet a recent initiative by the National Aeronautics and Space Administration (NASA) could make urban airborne travel more likely than ever in automotive history. The agency recently signed Space Act Agreements with 17 companies—including Toyota, Boeing, Airbus, and Hyundai—to participate in airborne transportation tests with the intention of radically transforming the transportation of people and goods in the near future.

A series of technology demonstrations, known as the Urban Air Mobility (UAM) Grand Challenge, will test the feasibility of additional airborne (some of them self-driving) transportation systems that include personal taxi services, emergency ambulances, and cargo delivery, all while promoting public confidence in advanced air mobility systems. "With this step," said NASA's associate administrator for aeronautics Robert Pearce in a press statement, "we're continuing to put the pieces together that we hope will soon make real the long-anticipated vision of smaller piloted and unpiloted vehicles providing a variety of services around cities and in rural areas."

While the drone technology the teams want to use for airborne travel is nothing new, the recent initiative aims to make its daily application in urban areas more realizable through conforming to

safety measures set by the Federal Aviation Administration (FAA). “Our partnership with the FAA,” said Pearce, “will be a key factor in the successful and safe outcomes for industry that we can expect from conducting these series of Grand Challenges during the coming years.” Additionally, Uber representatives have suggested that many of the currently existing aviation policies are sufficient for demonstrating the potential of UAM, and that air taxis could avoid ground traffic by linking urban centers with suburbs.



A rendering of UAM in Downtown Atlanta depicts several airborne vehicles traveling simultaneously thousands of feet above the skyline. (courtesy NASA)

According to a study conducted by Morgan Stanley Research last year, the market for UAM is projected to be worth \$1.5 trillion by 2040. “The intersection of many technologies,” said Adam Jonas, head of Morgan Stanley’s Global Auto and Shared Mobility research team, “such as ultra-efficient batteries, autonomous systems, and advanced manufacturing processes are spawning a flurry of activity in this space.”

Uber was the first of the 17 to announce a partnership with NASA in 2017, which later made plans for debuting an autonomous flying taxi in 2023 (the original 2020 deadline seems to have come and gone). The concept car, named Elevate, was expected to fly between 1,000 and 2,000 feet in the air at speeds of up to 200 miles an hour.

Psychology of Space: How Interiors Impact Our Behavior

Sourced From: <https://www.archdaily.com> / Christine Harrouk

With most of our lives spent indoors, the space we occupy has a major role in our psychological behavior. Environmental psychology or Space psychology is, in fact, the interaction between people and the spaces they inhabit. Lighting, colors, configuration, scale, proportions, acoustics, and materials address the senses of the individual and generate a spectrum of feelings and practices.

From inducing warmth and safety, defining well-being, or creating a positive and efficient working environment, space can have a whole lot of impact on how we act or on what we feel; therefore, design and creative measures should be considered according to the social and psychological needs of the occupants.

Psychology of space is in fact “the study of human relations and behaviors within the context of the built and natural environments” according to Dave Alan Kopec, a specialist in the field and professor at the New School of Architecture and Design in San Diego. Having a direct impact on your subconscious, contributing to your emotions and perceptions, through that special part of your brain that reacts to the geometry of the space you occupy, interior design became an inherent part of people’s psychology. Though it is not the only factor involved, interior space has big implications, and it is the architect’s responsibility to shape tangible solutions for users and incorporate these ideas into the structure.

With the rise of functionality in the last decades, space became a mere reflection of the program it holds. People were stacked in boxes to produce and feed into a consumer-oriented society. In fact, this idea of just cramming individuals in any place started as the industrial revolution brought flux of people into non-equipped cities. The regular house plan was divided to accommodate as many newcomers as it could retain. Homes and jobs were oriented towards fast-paced-production. Usage of space and the psychological understanding behind it came later on in the future.

Back to our modern times, in an article published in the Independent tackling the new designs of libraries, Dr. Sergio Altomonte, architect and associate professor in the department of architecture and built environment at the Nottingham university specified that “buildings and urban spaces should be designed first and foremost around their occupants. The importance of architecture as a trigger to physical, physiological and psychological wellbeing is nowadays becoming a topic of significant relevance.”

“Architectural cues can provide reinforcement to the desired behaviors that we would like to see enacted in specific place types,” says environmental psychologist and interior designer Migette Kaup. In other words, architecture is the physical mean. While key factors, that architects need to pay attention to, include safety, social connectedness, ease of movement, and sensory stimulation; more concrete measures encompass light, colors, art, ventilation, etc. For example, some principles of design comprising balance, proportion, symmetry, and rhythm can introduce a sense of harmony. Colors, on the other hand, have a very simple logic behind them, the warmer the color is, the more compact space becomes. They can also evoke feelings of comfort or stimulate communication. Light depends greatly on the function. A dim light suggests a gloomy space while a bright light defines a bigger animated appearance. Natural light stimulates production and recovery.

While some spaces add up to your anxiety, others provoke a sense of serenity, and you can’t seem to know why. In fact, not always evidence-based, environmental psychology focuses more on research, and on people’s interactions with their surroundings. On that, Irving Weiner, AIA, an environmental psychology professor at Massasoit Community College in Middleborough, Mass states that “some of these environmental influences we cannot see or touch, yet they have a direct influence on our behavior or mood.” Bottom line, the factors are not easily discernable.

Taken into account in the design process, space psychology can lead to better productivity in commercial projects, bigger sales in retail ventures, and accelerated recovery in healthcare developments. Nevertheless, with the absence of explicit guidelines, the translation into architecture is still unclear. It will highly depend on the designer's sensitivity, creativity, and understanding of the research. "Part of the problem is that much of the work in the field is very psychological [or] behavioral, and it doesn't easily translate into specific design recommendations," says Alan Hedge, a professor at Cornell University's Department of Design and Environmental Analysis.

At the end of the day, design is quite complex, and so are the individuals inhabiting these spaces. "Does architecture matter? Absolutely. Can it insulate people from the political circumstances around them? No" affirms Adrian Lahoud, Dean of the school of architecture at the Royal College of Art.

ASSOCIATION LINKS

- **Alberta Construction Safety Association (ACSA)**
www.acsa-safety.org
- **BuildingSMART Alliance** (North American Chapter of BuildingSMART):
www.buildingsmartalliance.com
- **BuildingSMART International (formerly IAI)**
www.buildingsmart.com
- **Biomimicry Guild**
www.biomimicryguild.com
- **Canadian Green Building Council (CaGBC)**
www.cagbc.org
- **CCDC Documents**
www.ccdc.org/home.html
- **Construction Specifications Institute (CSI)**
www.csinet.org
- **International Construction Information Society (ICIS)** www.icis.org
- **OmniClass**
www.omniclass.ca
www.omniclass.org
- **Uniformat**
www.csinet.org/uniformat
- **Institute for BIM in Canada (IBM)** www.ibc-bim.ca
- **Architecture 2030**
www.architecture2030.org
- **Building Information Modeling (BIM) Forum**
www.insightinfo.com/bimforum
- **Biomimicry Institute**
www.biomimicryinstitute.org
- **Canada BIM Council**
www.canbim.com
- **Canadian Green Building Council (CaGBC) – Alberta Chapter:** www.cagbc/chapters/alberta
- **Construction Specifications Canada (CSC)**
www.csc-dcc.ca
- **buildingSMART Data Dictionary**
bsdd.buildingsmart.org
- **MasterFormat**
(<https://secure.spex.ca/siteadmin/freedocuments/images/1.pdf>)
- **buildingSMART Canada**
www.buildingsmartcanada.ca
- **Ace BIM**
www.cebim.ca

ASSOCIATION LIAISONS

Alberta Association of Architects (AAA)
<http://www.aaa.ab.ca/>

Alberta Painting Contractors Association (APCA)
www.apca.ca

Alberta Wall & Ceiling Association (AWCA)
<http://awca.ca>

Alberta Roofing Contractors Association (ARCA)
<http://www.arcaonline.ca>
info@arcaonline.ca

American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
<http://www.ashrae.org/> / ashrae@ashrae.org

The Canadian Wood Council (CWC)

Alberta Painting Contractors Association (APCA)
www.apca.ca

Association of Professional Engineers, Geologists, and Geophysicists of Alberta (APEGGA)
<http://www.apegga.org/> dward@apegga.org

Association of Science and Engineering Technology Professionals of Alberta (ASET)
<http://www.aset.ab.ca/>
Russ Medvedev, russm@aset.ab.ca

Building Owners and Managers Association (BOMA)
<http://www.bomaedmonton.org/> / edmonton@boma.ca

Consulting Engineers of Alberta (CEA)
<http://www.cea.ca/> info@cea.ca

Edmonton Construction Association

<http://www.cwc.ca>
info@cwc.ca

Portland Cement Association
ConcreteTechnology@cement.org

Interior Designers of Alberta
www.interiordesignalberta.com

www.edmca.com
contact@edmca.com

Terrazzo, Tile & Marble Association of Canada (TTMAC)
<http://www.ttmac.com/>
association@ttmac.com



LARRY J. BENNER, CMA, CTR

Cell: 403.608.7669
Fax: 888.445.0740
lbenner@pilotgroup.ca

3240 Cedarille Dr. SW
Calgary, AB T2W 2H1

Bulletin Board

Message from the Executive:




















We in the Executive are looking for creative-minded individuals who can take on a position and follow through with ideas...if this is YOU, send a message to information@csc Edmonton.ca and we will be quick to get back to you!

Open Positions Include:

Officer Marketing
Newsletter Editor
Chapter Liaison

You don't need to be a member of the Committee to come and participate in our monthly Chapter meetings but watch out if you do! You may find yourself holding a position...maybe even as Chapter Chair...

The Executive

<p>Director / Newsletter Editor</p>  <p>Tracey Stawnichy, LEED AP, CSC Construction Administrator ACI Architects Inc. P: 780-994-3699 tstawnichy@aci-arch.com</p>	<p>Chair</p>  <p>Andrew Brassington, CTR Western Canada Sales Rep ROCKWOOL P: 587-341-5268 Andrew.brassington@rockwool.com</p>	<p>Vice-Chair</p>  <p>Dylan Leclair, CTR IKO Commercial P: 587-335-9552 Dylan.leclair@iko.com</p>	<p>Treasurer</p>  <p>Catherine Osborne Administrator ACI Architects Inc. P: 780-486-6400 cosborne@aci-arch.com</p>
<p>Secretary</p>  <p>Jessica Prosser Business Development / Sales DAAM Galvanizing - Edmonton P: 587-340-7169 jessica@daamgalv.com</p>	<p>Officer Architect</p>  <p>Kevin Osborne, CET, CSC Associate / Architectural Technologist ACI Architects Inc. P: 780-486-6400 kosborne@aci-arch.com</p>	<p>Officer Specifications & Website Development</p>  <p>David Watson FCSC, CET President NBS (Canada) (formerly Digicon) P: 780-758-4147 David.Watson@theNBS.com</p>	<p>Officer Professional Development</p>  <p>Mike Ewaskiw, CTR Architectural & Engineering Services Manager Stonhard / Fibergrate P: 780-237-7844 MEwaskiw@stonhard.com</p>
<p>Officer Engineer</p>  <p>Jamie Murphy, RET, P.L. (Eng), CCCA, LEED AP, Principal Read Jones Christoffersen P: 587-745-0266 JMurphy@rjc.ca</p>	<p>Officer Interior Design</p>  <p>Corry Bent, DID, BA Design cbent@shaw.ca</p>	<p>Officer Contractor</p>  <p>Renee McKenzie, Project Manager Jen-Col Construction P: 780-717-7798 mckren40@gmail.com</p>	<p>Officer Manufacturing</p>  <p>Mike Lafontaine Expocrete P: 780-962-4010 Mike.Lafontaine@oldcastle.com</p>
<p>Officer Technical Program</p>  <p>Kyla Keller Architectural Technologist / PM Planworks Architecture Inc. P 780-643-3233 x 63 KKeller@pwarch.ca</p>	<p>Officer Technical Program</p>  <p>Jessica Prosser Business Development / Sales DAAM Galvanizing - Edmonton P 587-340-7169 jessica@daamgalv.com</p>	<p>Officer Membership</p>  <p>Joseph Trivellin, CTR Technical Sales Rep, Edm Adex Systems P: 587-785-6484 Joseph.trivellin@adex.ca</p>	<p>Officer at Large</p>  <p>David Lawrence Retired P: 780-901-7260 davidlawrence@interbaun.com</p>
<p>Officer Sustainability</p>  <p>Position Open</p>	<p>Officer Marketing</p>  <p>Position Open</p>	<p>Officer Trade Contractor</p>  <p>Position Open</p>	<p>Officer – Owner’s Rep</p>  <p>Cam Munro, CTR Alberta Infrastructure P: 780-231-1739 Cam.munro@gov.ab.ca</p>