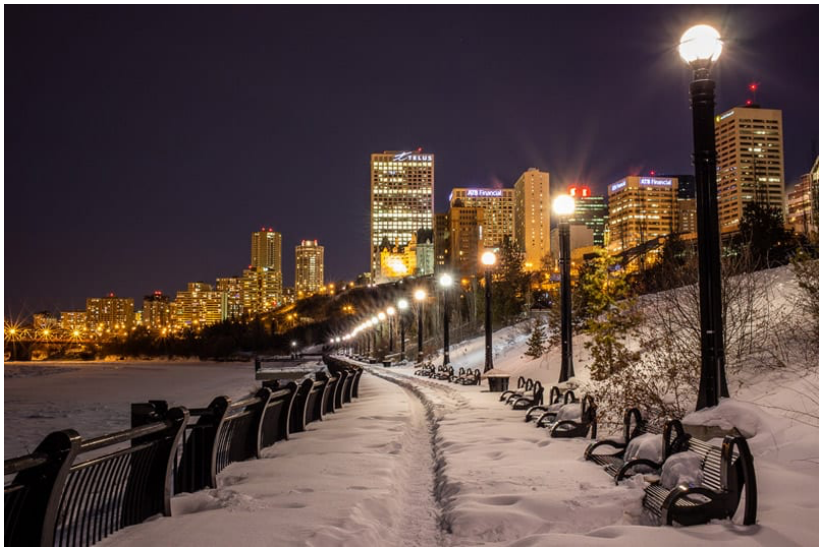
the edmonton Specifier

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.

January 2022 Edition

Editor: Tracey Stawnichy

In This Edition...



Wednesday, January 12, 2022, Noon – 1pm

Horizontal Membrane CEU

Presented by Mitchell Schittler

Commercial and institutional buildings in North America need to comply with a myriad of fire safety issues as defined by the International Building Code and National Building Code of Canada.

This course focuses on this fire safety issue, addresses the challenges of properly designing and testing horizontal assemblies, and looks at an innovative, attractive solution found in horizontal shaft wall construction.

2021 / 2022 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	Position Open	
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 Jessica Prosser	780 886 1281 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.

Announcements:

Chair's Message

Andrew Brassington, CSC Edmonton | Chapter Chair

Happy New Year, Chapter Members!

I hope you all had a great holiday and are looking forward to starting the new year.

While we continue to work virtually due to our current environment, I encourage you to take some time to look at our course and event offerings. This could be a great opportunity to educate yourself further or meet some new people. Follow us on social media to stay up-to-date on what is going on with the Chapter.

Your support is paramount. We are only as strong as our membership. Please make sure to take some time to renew your CSC membership.

Have a wonderful January and stay warm!

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 new and past CSC Edmonton Chapter Members!

Fresh Faces (New Members)

Philip Lynch, CAD/BIM Project Technologist, RJC Engineers
Tel: (780) 709-4163
Email: plynch@rjc.ca

Aamir Shaikh, Project Technologist, RJC Engineers
100, 17415 – 102 Avenue NW
Edmonton, AB T5S 1J8
Tel: (780) 901-7702
Email: ashaikh@rjc.ca

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

None this month.

Previous Members Re-Joining / Re-Activated

Alexander Grams, Specifier, DIALOG
100, 10237 – 104 Street NW
Edmonton, AB T5J 1B1
Tel: (780) 782-4612
Email: agrams@dialogdesign.ca

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) – January 10, 2022 – March 7, 2022
Construction Contract Administrator (CCA) – January 10, 2022 – March 14, 2022
Specifier – January 10, 2022 – April 4, 2022
Technical Representative (TR) – January 10, 2022 – March 28, 2021

Upcoming Workshops:

Principles of Construction Documentation (PCD) 5 Day Workshop – TBD
Construction Contract Administration (CCA) 5 Day Workshop – TBD
Specifier (SP) 7 Day Workshop – TBD
Technical Representative (TR) 5 Day Workshop – TBD

Social Media:

Check us out:

Articles of Interest

‘Canada’s EarthTower’ in Vancouver a Potential Hybrid Build Game Changer

Sourced from: https://canada.constructconnect.com / Don Proctor

PERKINS&WILL

A proposed 40-storey hybrid wood tower in Vancouver, possibly the tallest in the world, still needs to clear neighbourhood planning approvals and complete design requirements, but the city is “quite enthusiastic about the project,” largelyfor its low-carbon and high-performance attributes.

So said Peter Moonen, the national sustainability manager of the Canadian Wood Council, during a seminar on mass timber systems for tall buildings recently at the Buildings Show in Toronto.

Vancouver is not alone in its support for the project called “Canada’s Earth Tower.”

Natural Resources Canada through its Green Construction through Wood Program sponsored a design competition for the building. It hopes to spur innovation in the sector developing wood systems for tall buildings, Moonen told the seminar audience.

Sidewalk Labs’s (SL) submission was selected over two other finalists, each given $50,000 for full-scale mockups of next-generation panelized systems.

Moonen said the winning entry is a kit of “plug and play” parts that follows some of the design and assembly principles advanced by the auto manufacturing sector. SL’s submission covers bath, kitchen and bedroom pods but its prime focus is of the curtainwall system on the facade panels.

The winner’s panelized wood system was the “most precise” of the three – a key objective in tall wood buildings because “any errors or mistakes are compounded as you go up,” he told the audience.

PERKINS&WILL

The competition criteria required that the panelized system be open source (non-proprietary) so any company can use it or improve upon it.

Moonen said both of the other finalists, Element5 and the now-defunct Katerra, provided sound designs.

The 40-storey tower by the Delta Land Development in collaboration with architectural firm Perkins+Will is striving for Passive House certification and a zero-carbon standard.

Moonen said among the evaluation criteria of the competition was that the cost of the structure would have the same value as constructability, thermal performance, esthetics and design. That's unusual in the industry where structural costs can represent up to 50% of the criteria for approval.

He said a building's structural materials represent at best only 20% of a project's costs.

As the industry moves to green-friendly designs, materials and construction methods, Moonen sees buildings judged not just by their construction costs but also their environmental impact, socio-economic benefits, durability and livability, summed up as a development's "value proposition."

"People who have figured out how to do wood competitively have some consideration for the value proposition of building with wood."

He told the seminar that a key advantage to mass timber in tall towers is the speed of construction made possible through repetitive component assembly designs. A case in point is the 18-storey Brock Commons tower completed on the University of B.C.'s campus in less than 10 weeks.

Mass timber curtainwall facades for tall buildings are suitable not just on wood structures but also on concrete and steel ones.

"There is a real opportunity for them there," Moonen told the audience, adding he knows of three companies looking at prefabricated wood panels for exterior walls only. "It can add an element of beauty, of performance."

He told the audience as long as buildings are built, "you as designers, builders and engineers have to understand how to merge wood, steel, concrete and masonry into a building that is cost-effective, high performing, low-impact, beautiful and desirable by the people who are going to occupy it and live near it."

Adding that embodied carbon (a key benefit to mass timber) will likely be embedded in building codes in the next decade, Moonen noted as of 2017, the City of Vancouver required all city developments to have an embodied emissions report prior to rezoning approval.

Moonen's seminar was sponsored by the Ontario Building Envelope Council.

More Controversy at the Sagrada Familia, This Time Over a Crowning Star

Sourced from: https://www.archpaper.com / Jonathan Hilburg

Construction of the Basilica de la Sagrada Familia was delayed due to COVID-19, except for the spire representing the Virgin Mary, which was completed on schedule this year. (Ken Cheung/Unsplash)

The 139-year construction of the Basílica de la Sagrada Família in Barcelona has been fraught with delays and controversies, from the Spanish Civil War in 1936 (when chief architect Antoni Gaudí's original plans for the building were destroyed) to just last year, when construction was yet again slowed, this time by the COVID-19 pandemic.

Construction of the sprawling basilica has been underway since 1882, in no small part due to the project's sprawling scope and reliance on private donations for funding. The entire story of Jesus's life has been planned out in architecture: 18 massive spires, each heavily decorated, are planned, one for each of the 12 Apostles, one for the Virgin Mary, four for the Evangelists, and the final, representing Jesus himself, a central tower that would look down upon the others at a height of 566 feet. The Gothic basilica, officially consecrated as such in 2010 by the Pope, is generally thought of

as one of the style's exemplary structures, and the portions that were completed during Gaudí's lifetime are designated a UNESCO World Heritage Site.

However, there has always been tension between resident groups and the Junta Constructora del Temple Expiatori de la Sagrada Família, the nonprofit board overseeing construction, over how closely the project hews to Gaudí's vision. This week was no different, as a massive star erected atop the recently completed Virgin Mary spire. On Monday, November 29, a 12-pointed crystal star bearing more than a passing resemblance to a Swarovski piece was craned into place atop the 452-foot-tall tower, and according to The Guardian, residents aren't happy.

Salvador Barroso, a spokesperson for one of those aforementioned groups, described the star as "aesthetically horrible" to The Guardian. The 23-foot-wide, 6-ton glass star is a marked departure aesthetically from the rest of the basilica complex, even with the art deco flourishes throughout. The star and the basilica's 800 windows will be illuminated on December 8 to celebrate the Immaculate Conception.

Still, a bigger concern for residents – and one that they claim the foundation has been ignoring their complaints over – is the plan for a massive staircase up to the basilica's main entrance that would require demolishing three entire city blocks. Nothing is set in stone, and the foundation has deferred to Barcelona's City Council, claiming the onus (and responsibility for potentially displacing up to 1,000 residents) is on them to decide.

While the foundation claims that the staircase was part of Gaudí's original plan for the basilica, residents and some preservationists are convinced that it was added by his successors and can be scrapped without jeopardizing the integrity of the design.

Regardless of whether the plan for the staircase is ever finalized or not, work on it likely won't begin for quite a while. At the beginning of the pandemic, citing economic uncertainty, the foundation put all work on hold at the basilica except for the Virgin Mary spire until 2024. The entire complex was originally slated for completion in 2026, the 100th anniversary of Gaudí's death, but that deadline obviously won't be met given the delay.

Meet the Winners of the 2021 Emerging Leader Awards

Sourced from: https://www.constructioncanada.net e

The winners of Construction Canada's 3rd annual Emerging Leader Awards were announced at the Buildings Show at the Metro Toronto Convention Centre on December 3.

The awards, presented by Engineered Assemblies, honour members of the architectural, engineering, and construction (AEC) community who demonstrate excellence, impress and inspire their co-workers, and are well on their way to becoming the next leaders in the profession.

Here are the recipients of the 2021 Emerging Leader Awards.

Emerging Leader Awards – Leadership and Jury's Choice

Dr. Henry Tsang, PhD, OAQ, MRAIC, LEED GA, WELL AP, principal at Henry Tsang Architect and assistant professor at RAIC Centre for Architecture, Athabasca, Alberta.

Awards were accepted by colleague Shane Laptiste.

Emerging Leader Award – Initiative

Nicholas Kaminski, P.Eng., M.Eng., PMP, structural engineer at KGS Group, Regina, Saskatchewan.

Emerging Leader Award – Teamwork

Christopher Paul David, ARIDO, NCIDQ, president of David Visual Communications Ltd., North York, Ontario.

Emerging Leader Award – Technology Advancement

Kelsey Van Steele, P.Eng., associate at RJC Engineers, Vancouver, British Columbia.

Emerging Leader Award – Industry Contribution

Samuel Oboh, FAIA, FRAIC, principal/vice-president, region 3, at Ensight+ Architecture Inc., Edmonton, Alberta.

Emerging Leader Award – Community Contribution

Elisia Neves, OAA, MRAIC, B.A.Sc. (Honours), M.Arch, founder and CEO of Fabrik Architects Inc., Cambridge, Ontario.

Artificial Sun, Which Could Create Almost Limitless Clean Energy, Breaks Plasma Record

Sourced From: Sourced from: https://www.msn.com / Robert Lea

The aim of researchers to bring nuclear fusion – the process that powers the stars – down to Earth has been bolstered after the Korea Institute of Fusion Energy's Korea Superconducting Tokamak Advanced Research (KSTAR) reactor maintained super-hot plasma within a magnetic field for 30 seconds.

The achievement is a step forward in scientists' desire to harness the fusion that occurs at the heart of the Sun, and then reproduce it on Earth in a controlled manner.

Should they succeed, fusion power will provide the world with a safe, sustainable, environmentally responsible, and abundant source of energy.

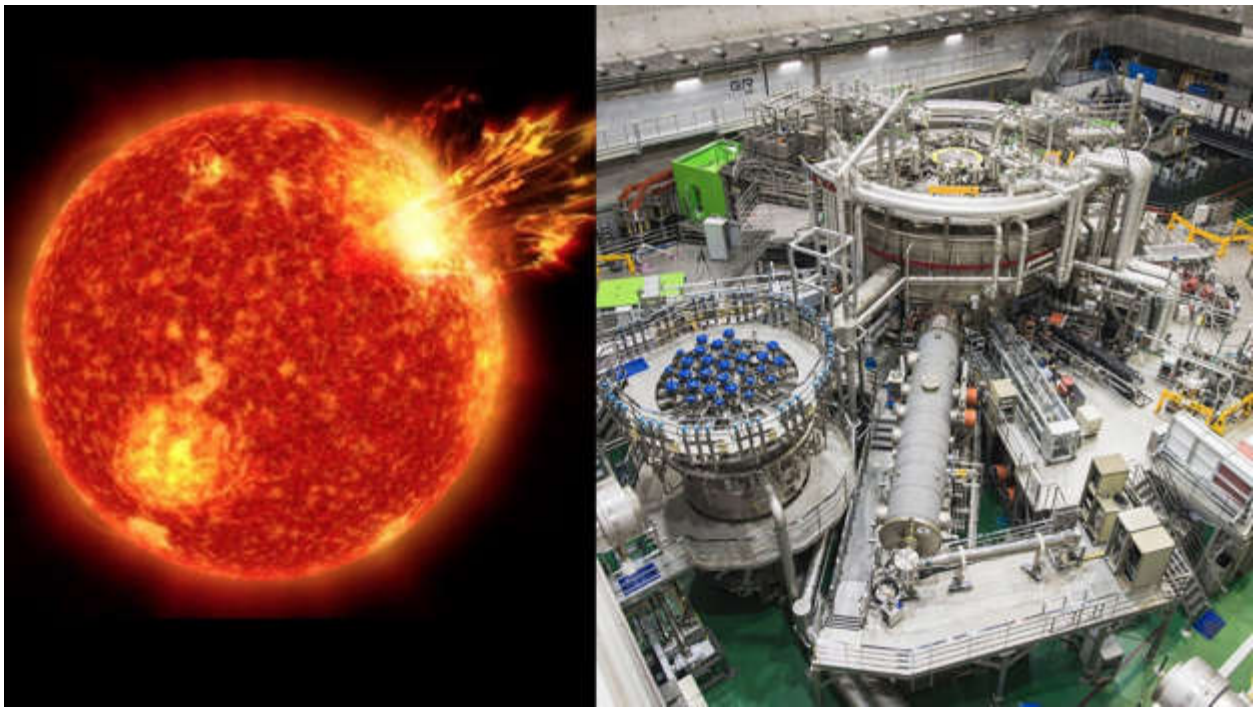
Fusion is almost the reverse of nuclear fission (which powers the world's nuclear reactors). Whereas fission consists of the breaking apart of heavy atoms such as uranium, fusion involves the smashing together of light atoms to make heavier atoms and energy.

Fusion is a cleaner process as it creates no radioactive waste, and proceeds with light and abundant materials like hydrogen, which can be obtained from seawater, rather than expensive and rare elements, such as uranium or plutonium.

Theoretically, one liter of water could provide enough raw material for fusion to produce as much energy as the combustion of 300 liters of oil.

Nuclear fusions devices like KSTAR, known as tokamaks, replicate plasma, a state of matter created under the massive gravitational pressure and intense heat of stars like the Sun.

In this super-hot stellar plasma, hydrogen atoms smash together at high velocities creating helium atoms. In the process, these fusions create vast amounts of energy radiated by stars.



© NASA/Goddard Space Flight Center/Conceptual Image Lab/National Research Council of Science & Technology – An illustration of the sun showing a powerful plasma outburst. KSTAR which aims to replicate the processes that occur in stars like the sun here on Earch. KSTAR recently confined plasma at superhot temperatures for a record 30 seconds.

To copy this, tokamaks – often referred to as "artificial suns" – must heat heavy helium (deuterium) with lasers to temperatures as high as millions of degrees Fahrenheit, confining it within powerful magnetic fields.

To generate fusion energy, these artificial suns have contained the plasma at these temperatures long enough for atomic nuclei to begin smashing together.

In 2016, KSTAR set a world record for maintaining plasma heated by containing plasma heated to 90 million °F for 70 seconds. This record was broken in 2017 by China's Experimental Advanced Superconducting Tokamak (EAST) when it sustained 90 million °F plasma for 102 and seconds.

While this temperature is hotter than those in the Sun when fusion processes occur (about 60 million °F), because researchers here on Earth can't replicate the intense pressure generated by gravity at the heart of a star while on Earth, temperatures in an artificial sun must be much greater to compensate. That means heating plasma to at least 180 million °F in a tokamak for atomic nuclei to smash together rapidly enough to kick start nuclear fusion.

KSTAR was the first device to break this limit, generating these temperatures in plasma for just 1.5 seconds in 2018.

The team improved on this 2019, maintaining plasma at this temperature for eight seconds. KSTAR upped the ante on this again in December 2020 by generating plasma at this temperature and maintaining it for 20 seconds.

While KSTAR's new record can't beat EAST's record in terms of time, what the researchers on the project have managed to do is heat plasma to this important temperature of 180 million °F.

The KSTAR team was also able to constrain this plasma for a record 30 seconds.

The Korea Institute of Fusion Energy will now seek to improve KSTAR to increase the time that it can maintain plasma at a temperature of 180 million °F. The aim will be to achieve containment of this super-hot plasma for at least 300 seconds.

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.acebim.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)
http://www.cwc.ca
info@cwc.ca

Portland Cement Association
ConcreteTechnology@cement.org

Interior Designers of Alberta
www.interiordesignalberta.com

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
www.edmca/.com
contact@edmca.com

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

Bulletin Board

Message from the Executive:

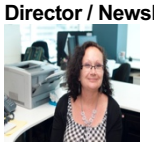
We in the Executive are looking for creative-minded individuals who can take on a position and follow through with ideas…if this is YOU, send a message to information@cscedmonton.ca and we will be quick to get back to you!

Open Positions Include:

Officer Marketing
Newsletter Editor
Chapter Liaison
Marketing

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

Director / Newsletter Editor  Tracey Stawnichy, LEED AP, CSC Contract Administrator ACI Architects Inc. P: 780-994-3699 tstawnichy@aci-arch.com	**Chair**  Andrew Brassington, CTR Western Canada Sales Rep ROCKWOOL P: 587-341-5268 Andrew.brassington@rockwool.com	**Vice-Chair**  Dylan Leclair, CTR IKO Commercial P: 587-335-9552 Dylan.leclair@iko.com	**Treasurer**  Catherine Osborne Administrator ACI Architects Inc. P: 780-486-6400 cosborne@aci-arch.com
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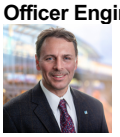
Officer Engineer  Jamie Murphy, RET, P.L. (Eng), CCCA, LEED AP, Principal Read Jones Christoffersen P: 587-745-0266 JMurphy@rjc.ca	**Officer Interior Design**  Corry Bent, DID, BA Design cbent@shaw.ca	**Officer Contractor**  Renee McKenzie, Project Manager Jen-Col Construction P: 780-717-7798 mckren40@gmail.com	**Officer Manufacturing**  Mike Lafontaine Expocrete P: 780-962-4010 Mike.Lafontaine@oldcastle.com
Officer Technical Program  Kyla Keller KK Specs P 780-886-1281 kkspecs@outlook.com	**Officer Technical Program**  Jessica Prosser Business Development / Sales DAAM Galvanizing - Edmonton P 587-340-7169 jessica@daamgalv.com	**Officer Membership**  Position Open	**Officer at Large**  David Lawrence Retired P: 780-901-7260 davidlawrence@interbaun.com
Officer Sustainability  Position Open	**Officer Marketing**  Position Open	**Officer Trade Contractor**  Position Open	**Officer – Owner's Rep**  Cam Munro, CTR Alberta Infrastructure P: 780-231-1739 Cam.munro@gov.ab.ca