

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 2023 Edition

Editor: Tracey Stawnichy

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Happy New Year From Your Edmonton Chapter Executive!



2023 / 2024 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	780 705 7108
Architectural	Kevin Osborne	780 717 1007
Chapter Liaison	Position Open	
Education	Mike Ewaskiw	780 237 7844
Engineer	Jamie Murphy	780 983 0288
General Contractor	Position Open	
Interior Design	Corry Bent	780 995 1647
Manufacturer/Supplier	Mike Lafontaine	780 907 4920
Marketing, Promotion, and Communications	Jamie Murphy	780 983 0288
Membership	Dave Lawrence	780 901 7260
Newsletter	Tracey Stawnichy	780 994 3699
Specifications	David Watson	780 758 4147
Website Administrator	David Watson	780 758 4147
Trade Contractor	Kevin Kramers	587 232 0613
Program	Abby Sharpe	587 338 9194
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/](http://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:

Chair's Message



Andrew Brassington, CSC Edmonton | Chapter Chair

Happy New Year, Chapter Members!

We have a lot of new events in the coming months that provide great opportunities to connect. Looking to update your education? Take a look at the course offerings we have and make a plan to learn something new!

Our Executive Committee has a few open spots. If you're interested in volunteering, please reach out to someone on the Executive Committee.

Last but not least, please make sure you make the time to renew your membership. Your support is greatly appreciated and contributes to the execution of our industry events and initiatives.

I wish you all the best in the new year and look forward to seeing you at future events!

Membership in CSC

Dave Lawrence



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)

Howard Chimko

Regional Roof Inspections & Consulting Ltd.
40, 4004 – 97 Street, Edmonton, AB T6E 6N1
P: (780) 438-4747
E: hccric@telus.net

Sarah Kirby, Contract Administrator

GEC Architecture
310, 14055 West Block Dr. NW, Edmonton, AB T5N 1L8
P: (780) 421-8060
E: sarah.kirby@gecarchitecture.com

John Slowski, Senior Tech. Sales Representative

NUDURA IFC
Part of the Tremco Construction Products Group
118 Glencoe Blvd., Sherwood Park, AB T8A 5J5
P: (780) 915-7831
E: jslowski@nudura.com

Amie Wright, Contract Administrator

GEC Architecture
310, 14055 West Block Dr. NW, Edmonton, AB T5N 1L8
P: (780) 421-8060
E: amie.w@gecarchitecture.com

Abby Sharpe, Architectural Sales Representative

Brock White
11208 – 40th Avenue NW, Edmonton, AB T6J 0R2
P: (587) 338-9194
E: abby.sharpe@brockwhite.com

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, Manager, Architectural & Engineering Services, Stonhard

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.
P: 780-237-7844 E: mewaskiw@stonhard.com

EDUCATION COURSES

Upcoming Classes:

Principals of Construction Documentation (PCD) – Monday, January 16, 2023 @ ACI Architecture Specifier – TBD

Construction Contract Administration (CCA) – TBD

Technical Representative (TR) – TBD

Upcoming Classes Online:

Principles of Construction Documentation (PCD) – TBD

Construction Contract Administrator (CCA) – TBD

Specifier – TBD

Technical Representative (TR) – TBD

Upcoming Virtual Classes:

Principles of Construction Documentation (PCD) – TBD

Construction Contract Administration (CCA) – TBD

Specifier (SP) – TBD

Technical Representative (TR) – TBD

Social Media:

Check us out:



InfoNet 2023

What Is InfoNet?

InfoNet is the CSC Edmonton Chapter's premier event of the year that combines networking, education and inspiration. Join us for this half day experience and learn about new materials and technologies, reacquaint yourself with people in the design and construction industry and be inspired to foster some "out of the box" thinking.

Looking To Attend?

This is a sponsor invited event. If you have yet to receive an invitation, please contact your local material representative. Alternatively you can e-mail edmonton@csc-dcc.ca and a member of the committee will reach out to hosting tables. If you have any questions, feel free to contact any member on the InfoNet Committee.

Website:

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

Date: April 06, 2023

Location: Edmonton Polish Hall
10960 104 Street N.W. Edmonton

2:00pm	Reception and Tradeshow
5:30pm	Host Announcements
5:45pm	Dinner
7:00pm	Host Introductions
7:20pm	Keynote Speaker
9:00pm	Networking



ADAM KREEK

Adam Kreek is one of North America's top executive business coaches specializing in accelerating results through leadership development, strategic planning, and values-driven achievement.

With his team at Values-driven Achievement, Adam's mission is to provide growth-oriented leaders with knowledge, tools and accountability to lead effectively, execute with confidence and deliver distinguished results.

Adam has coached, trained and taught hundreds of thousands of people and teams at organizations including Microsoft, Amazon, Pfizer, Wells Fargo, General Electric, Mercedes-Benz, Royal Bank, L'Oreal, Shell, YPO, EO, and TEDx to advance with certainty, serve fearlessly, and sustain results. Most importantly, Adam walks the talk.

Prior to executive coaching and training, Adam worked in the financial and engineering fields. A two-time Olympian, Adam holds 60 international medals, including Olympic Gold and multiple hall of fame inductions. In 2013, Adam made the first-ever attempt to row unsupported across the Atlantic Ocean from Africa to America, the subject of the NBC Dateline Documentary, Capsized.

Adam's bestselling book, The Responsibility Ethic, teaches us the HOW of self-leadership, driving personal and professional results in individuals and organizations.

After hours, you'll find Adam raising three spirited kids with his wife, and adventuring outdoors in the Pacific Northwest. Adam holds a degree in Geotechnical Engineering and Hydrology from Stanford University, along with ECPC ACTP certification and ICF Coaching credentials.

MEET YOUR CSC EXECUTIVE COMMITTEE MEMBERS

Cam Munro, CTR

Officer – Owner's Rep

Alberta Infrastructure



What motivated you to join this industry?

Contacts and education.

How long have you been in the industry?

Since 1985.

What's the one thing people would be surprised to learn about you?

I used to collect and restore classic cars.

What's the most interesting project you have been a part of?

Every project has interesting parts – could be location, clients, end users...hard to nail down to a single project.

What is one thing you like to see in the next 20 years?

Better integration with digital project delivery

Articles of Interest

Edmonton Fire Station Goes Net-Zero Via the Sun and the Ground

Sourced from: <https://canada.constructconnect.com> / Warren Frey

A new Edmonton fire station will accomplish net-zero energy from above and below.

CITY OF EDMONTON – Windermere Fire Station No. 31 located in southwest Edmonton will use geothermal and solar power to achieve net-zero energy use.



Windermere Fire Station No. 31 is located in southwest Edmonton in a rapidly expanding neighbourhood. The project, which has a budget of \$18.29 million is the City of Edmonton's first net-zero building, a feat it accomplishes through a combination of solar arrays, geothermal heating and cooling and sustainable design.

City of Edmonton director of facility planning and design Shannon Fitzsimmons said a fire station's highest priority is to meet its operational requirements.

"Trying to integrate those requirements in a net-zero design build is a challenge," she said. "There are limitations that have to be considered and ultimately because of the nature of that service it's important that the building performs for their service requirements first and foremost, such as response times."

Going net-zero necessitated a rethink from traditional fire hall designs, she added.

"One of the challenges you're faced is that a fire station with three bays has very large doors that open and close repeatedly for the trucks to move, for the apparatus to move in and out. So any time

you open a large door you create a large opening in a building, you lose potentially any energy gains you've made either in heat or cooling," Fitzsimmons said.

The design team managed the problem by creating a new door system where instead of one horizontal bifold door system, two doors met in the middle to quickly close an opening and prevent heat from escaping.

"The faster the time a door is open and the time it takes to close is reduced significantly. It's a matter of seconds and it makes a difference for maintaining the efficiency of the building. It also helps with response times for moving the apparatus out that much quicker as every second counts when those teams are responding to emergencies," she said.

CITY OF EDMONTON – A solar array with over 382 modules at 375W each is on the fire station roof to take full advantage of Edmonton's sunny summers and winters.



A solar array with over 382 modules at 375W each is on the structure's roof. While the station has required redundancies and backup systems, Fitzsimmons said the panels generate a substantial amount of energy.

"Edmonton gets 2,300 hours of bright sunshine per year and is one of the sunniest cities in Canada, so we're able to harvest that energy, which is great," Fitzsimmons said.

The facility is also using geothermal heating and cooling to further its net-zero goals.

"We've constructed a geothermal field located in the outdoor parking area of the station. It's 34 or 35 boreholes drilled like a well. They're 230 feet deep and by going that deep into the Earth's surface you're able to harvest either the heat or the cooling depending on the time of the season and transfer that to the building through a ground source heat pump," she said.

Monitoring systems are also in place to ensure optimum sustainability performance, she added.

"We certainly have systems installed, but we also have the resources of the city as well for measurement and verification of performance of the system. We have the capacity to do that and then understand if adjustment needs to be made. We can even make that information available to the public so they can see the benefits," she said.

In 2018 the fire station's building design won the Canadian Architect 2018 Award of Excellence. The lead design architect was gh3* and the prime consultant was S2 Architecture.

The City of Edmonton projects the project will be complete by summer 2023 and Fitzsimmons said the facility will also be in-service by that time.

"Once construction is complete, it does take time for a fire crew to set up their equipment and do all the testing to make sure that everything is operating as it should. It's a little more involved than moving into a standard building," she said.

In Memoriam Device Detects When Someone Dies Alone

Sourced from: <https://www.dezeen.com> / Jane Englefield

Designer Ony Yan has created a two-part system that can be installed in single-person households to notify neighbours in the event of their death and was designed to "encourage a community to look after each other".

In Memoriam, a functional prototype system that can be installed in homes, comprises a battery-powered odour detector and a signal lamp that are linked by a wireless connection. Programmes here are susceptible to longer overruns than most other regions: almost 83% of planned schedules on average.

A signal lamp lets passerby know that someone has died.



Subtle in shape and colour, the white odour detector can be discretely fixed to a wall and reacts to the sulphur compounds that are released when a human body decays after death.

The black signal lamp – which is placed at the entrance of the home – then receives this information from the detector wirelessly. An in-built servomotor tilts the upper part of the lamp 45 degrees, revealing a glowing light informed by candles that was designed to attract the attention of neighbours and passersby.

"The odour detector hangs at eye level – or breathing height – because my chosen volatile organic compounds as indicators of decay, in this case, sulphur compounds, are heavier than the ambient air," explained Ony.

The odour detector is composed of metal, wires, and a circuit board encased within polystyrene.



"It is similarly comparable to installing carbon monoxide detectors, which are often placed at the same height."

Ony created the project as part of her bachelor's thesis while studying Industrial Design at Berlin's University of Applied Sciences.

The designer told Dezeen that she created the project after "a tragic case" in her neighbourhood, where someone died and their body wasn't discovered until much later when it had started to decay.

Future-Proofing Design: How Interiors Will Evolve in 2023 and Beyond

Sourced from: <https://www.archdaily.com> / Written by Materials

As we take stock and analyze the year 2022 from the most visited articles in our Materials section, it is clear that issues related to interiors have strongly resonated with our readers. While humanity spends more time indoors, both in physical and now even virtual realms like the metaverse, the forms and functions that define these interior spaces have acquired greater importance and value. Experimenting with fluid, flexible and versatile spaces is a trend that we have been witnessing for some years now, driven mainly by the impacts of the countless lockdowns still present in our memory. The chaos and uncertainty we experienced made us understand the importance of buildings with spatial awareness and sensitivity –those able to anticipate and take responsibility for the effects they have on their inhabitants. Factors such as orientation, the size and distribution of rooms, the use of natural light and ventilation, and the overall aesthetics of the space are essential. Technological advances have taken center stage and disrupted traditional interior design, giving rise to new and innovative approaches to domestic efficiency and circularity.

Through three different approaches –operations, aesthetics and energy–, below we provide a forecast of how we think interior spaces will evolve from 2023 onwards.

Space and Operation: Small Gestures for a Better Life

Envisioning a sustainable and smart future, current trends are following ‘living layout’ designs through the creation of customizable, changeable spaces, which respond to the challenge of maximizing and enhancing the use of space. Allowing the connection between traditionally separated areas and playing with several spaces in one enables dynamic layouts that apply a user-center strategy.

From daily arrangements to repurposing and updating existing buildings, simple, yet high-impact gestures adapt spaces to life and not the other way around.

Complementing these architectural operations, the organization of elements within a space is key to determining the flow of movement, where both integrated and self-standing furniture are allies in the design of spatially-conscious buildings.

According to the UN, reshaping how urban dwellers live through the digitization of design “encompasses various smart technological innovations that enable ubiquitous computing (making technology more seamlessly integrated into our lives, available whenever and wherever it is needed), big data collection, machine learning and autonomous decision-making”. All of this translates into futuristic systems such as robotics, visual techniques, artificial intelligence and automated processes with the ability to improve various facets of society’s well-being.

How can virtual tools influence our everyday spaces in the near future? It is already happening: technological advances linked to holographic projections are making it possible to alter the spatial experience of any environment, creating mutable scenarios that can be customized for different purposes, situations and users. By integrating artificial intelligence into architectural design, images take a step forward by helping users to inspire and visualize potential interventions in a real space. Home automation, for its part, allows efficient use of lighting resources to virtually modify spaces, making smaller rooms feel larger and more open, for instance.

The assimilation of these tools within architecture allows us to envision a future in which digitalization enables design to adapt to dynamic and ever-changing circumstances. Thus, it promotes the cohesion of architecture with ongoing living trends, such as supporting remote living through mutable layouts with changeable functions throughout the day and designing transformative spaces able to evolve (and grow over time) without becoming obsolete.

Space and Aesthetics: The Modernized Return of Rusticity

Emerging from years of unprecedented changes, we have dictated how we want our living spaces to look like: functional, appealing, calm, with a strong identity and in harmony with the outdoors.

Reflecting on the aesthetic trends that gained ground in 2022, we witnessed a renewed appreciation for a "modernized rusticity" and all that it implies: tradition, the local, the richness of materials, light, views, and everything that makes us feel good and connected to our surroundings.

Soul-less, overly minimalist interiors are no longer desirable; as Nikos Salingaros once said, "We are repelled by environments that do not provide us with meaning, either because of a lack of visual information, or because the information present is unstructured." Instead, we find value in texture, color and ornaments, leaning towards personalized spaces guided by liveliness, naturalness, and warmth. From digitization to robotics, new technologies allow architects to design with meaning while meeting modern demands.

Traditional organic materials have been updated in ways that optimize performance and sustainability without losing their ruggedness, natural beauty, and intrinsic biophilic qualities.

2022 saw some notable examples: the use of cross-laminated timber in a high-rise building, and the innovative development of Structural Engineered Bamboo. Rusticity was also embraced by re-discovering the beauty of materials' natural life cycle, whether it be oxidized copper, weathered stone, untreated wood or even high-tech materials changing their appearance as a response to external stimuli, such as self-healing concrete or thermochromic glass.

So, with this promising background, what does the future hold for aesthetics? Interiors will be transformable, modular, smarter and (literally) greener, merging nature with technology and consuming resources efficiently. VR and AR tools will create increasingly immersive experiences, biophilic design will evolve into living surfaces that grow plants or fungi, and programmable materials will be modified by computer algorithms to suit users' needs. Along with artificial intelligence, the data revolution will govern all aspects of design, transforming the way architects work by helping them identify and measure trends and consumer preferences to create more personalized design solutions.

If we imagine a world where these visions take shape, the concept of aesthetics might even become obsolete, as nature and technology will ultimately define how spaces will look, feel and the emotions they will evoke.

Space and Energy: Powering Everyday Life Efficiently

Observing buildings, and their interiors, as living organisms is not exactly new. Currently, however, circularity adds a layer of complexity and consistency to this concept. With a circular urban metabolism, resources are conserved, and waste is minimized by the reuse of materials and energy, reducing extraction and waste. Interior spaces should efficiently use the energy needed to function, while also taking care of what is wasted.

Unlike in the past, energy can be generated decentrally – through sun, wind, earth, and water – and no longer requires large power plants or public infrastructure. There is a movement of self-powered homes or even off-grid buildings which work as their own ecosystems, handling all their own needs.

Although technologies such as wave power are still not very accessible, some options are becoming more affordable. This includes small-scale wind turbines, photovoltaic systems or harnessing temperature at the center of the Earth to heat and generate electricity.

But just as important as generating energy is using it in the most efficient and intelligent way. A building's metabolism can be optimized in many ways; by using low-energy systems and appliances, with appropriate envelope materials and design, green infrastructure, and by taking advantage of the

resources we receive for free, such as natural lighting and ventilation. Altogether, this reduces buildings' energy consumption and improves indoor air quality.

In the coming years, cities and indoor spaces are expected to prepare for the great challenges of the future, namely societal changes and the climate crisis. Circularity applied in all spheres –from the home environment to urban guidelines – is a key concept for a more encouraging future. If smart lighting or digital assistants like Alexa no longer surprise us, in the near future, we should have access to the integration of robotics and automation. Home automation technologies, coupled with the application of IoT (Internet of Things), should be facilitators of a circular economy, promoting a better use of resources and reducing environmental impact. Moreover, robotics and automation are expected to be further incorporated into our routines, not only revolutionizing the way we live, but also how we interact with the environment. Along with this flood of technology, we are also seeing how much we miss nature, and the biophilic design trend will surely continue (and strengthen) looking ahead.

Although it is too early to understand what the limits of artificial intelligence, robotics and other new technologies will be, the field is rapidly advancing and evolving with new innovations coming to light every day. It will be intriguing to observe how these developments will unfold in the coming years, but until then, one thing is certain: studying, appreciating and reflecting on the natural world will always be an insightful and smart move. Our future still cannot be written with absolute certainty, but we can expect three words to be present: nature, technology and well-being.

CarbonPositive: Carbon Intelligence for Reuse Decisions

Sourced From: Sourced from: <https://www.architectmagazine.com> / Erin MdCade, Lori Ferriss

Thanks to a new tool, architects and building professionals can accurately quantify the emissions savings of “reuse versus replacement.”

Renovation work is on the rise. For the first time in the two decades during which The American Institute of Architects has collected data on architectural billings, renovation work has overtaken new construction as a percentage of total billings. As Zach Mortice reported recently in Bloomberg, “In 2005, toward the end of a pre-recession building boom, renovations made up approximately one-third of billings. That share has been increasing steadily since 2017, when it was 44.4%, up to 52% this year.”

This growth represents an evolution in how we value our existing built fabric, knowing that emissions avoided today are worth more than reductions promised in the future. While attention often centers on carbon-smart strategies for new construction, we will not build our way to an emission-free built environment; we must reuse existing building stock effectively. Renovating a structure usually has a much lower upfront carbon footprint than building new, because renovations typically reuse the emissions-intensive parts of the building—the foundation, structure, and envelope. Retrofitting an existing building can dramatically reduce its operating emissions.

Despite this intuitive knowledge, the building industry has lacked the ability to easily compare the variables of embodied and operating emissions over specific time frames for reuse and new-construction scenarios. This means that the potential avoided emissions associated with reuse are typically unaccounted for in design processes, owner requirements, and climate policies and regulations, representing a major data gap.

The Carbon Avoided Retrofit Estimator Tool is an online tool to help address this gap. The idea for the tool originated when Larry Strain, FAIA, founder of Siegel & Strain Architects, was asked by a building portfolio owner for a resource that could identify the carbon emissions avoided by choosing to

reinvest in buildings rather than replace them. With no existing resource to point to, Strain drafted the first version of the estimator.

Now in partnership with Architecture 2030 and Goody Clancy, the CARE Tool empowers owners, developers, and design teams with the ability to quantify the environmental value of reuse decisions. Retrofitting an existing building to zero operating emissions will almost always be the lowest carbon option. But what if you can only reduce its operating emissions by 50%, or plan to replace it with a net-zero-operating-emissions building? And how do geography, grid intensity, and the condition of the existing building affect those considerations?

The CARE Tool estimates the avoided operational and embodied carbon emissions associated with reusing and upgrading a building or replacing it with new construction. Outputs are visualized as total embodied and operational emissions over a specified time frame as well as cumulative emissions over time, for three scenarios: the existing building, the renovated building, and the new construction. Results can be compared to determine the lowest total-carbon approach and the time frame in which that occurs.

The CARE Tool can also be used by policymakers, planners, building owners, developers, heritage building officers, architects, and others who are interested in a pre- or early-design, high-level assessment of the total emissions impact of building reuse versus replacement. With retrofits on the rise and the urgent need for climate action, tools like CARE fill a critical gap in our understanding and valuation of the existing building stock as an important climate asset.

ASSOCIATION LINKS

- **Alberta Construction Safety Association (ACSA)**
www.acsa-safety.org
- **Alberta Building Envelope Council (ABEC)**
www.abecnorth.org
- **Building Information Modeling (BIM) Forum**
www.insightinfo.com/bimforum
- **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**
- **Architecture 2030**
www.architecture2030.org
- **BuildingSMART Alliance** (North American Chapter of BuildingSMART):
www.buildingsmartalliance.com
BuildingSMART International (formerly IAI)
www.buildingsmart.com
- **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.csinet.org/uniformat
- **Institute for BIM in Canada (IBM)**
www.ibc-bim.ca

- 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@csc Edmonton.ca and we will be quick to get back to you!

Open Positions Include:

Chapter Liaison
Sustainability
Contractor's Rep

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

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