



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.

November 2020 Edition

Editor: Tracey Stawnichy



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**2020 / 2021 Edmonton Chapter Executive**

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<b>At Large</b>	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  
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**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](http://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:

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## Chair's Message

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**Andrew Brassington, CSC Edmonton | Chapter Chair**

Hello Chapter Members,

As you have probably noticed, COVID-19 is on the rise again after a relatively calm summer. We continue to look for opportunities to have in person events, but due to the current environment we are unable to execute them at this time.

Being realistic, we do not expect any in person events for 2020. We will keep you up to date with our expected events for next year including a joint event with the Calgary Chapter.

Please take the time this month to remember those who lost their lives for us.

Stay Safe!

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## Membership in CSC

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**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.

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## 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.

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## CSC Education:

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**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](mailto:mewaskiw@stonhard.com)

## EDUCATION COURSES

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### 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](#) – TBD  
[Construction Contract Administration \(CCA\) 5 Day Workshop](#) – TBD  
[Specifier \(SP\) 7 Day Workshop](#) – TBD  
[Technical Representative \(TR\) 5 Day Workshop](#) – TBD

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### Social Media:

### Check us out:





## New CCDC 2 and online training

The Canadian Construction Documents Committee (CCDC), is pleased to announce that this winter CCDC will be publishing the new version of the CCDC 2 'Stipulated Price Contract' and the brand-new Master Specification for Division 01 'General Requirements' and CCDC 31 'Service Contract Between Owner and Consultant' documents. CCDC will also be providing online training to explain the key changes to CCDC 2 and to introduce the new Division 01 document.

Online training will be held in November, consisting of four distinct presentations. [\(French\)](#)

### **Presentation 1: An introduction to CCDC (Pre-recorded, you may review at your convenience)**

This 20-minute opening presentation will summarize the operation of CCDC, including how documents are developed, the new documents coming this winter, and what documents the committee is currently working on.

### **Presentation 2: Changes to CCDC 2 - Sessions will be held each weekday from November 16 to 27 at the following times 8:30AM – 10:30AM (ET) and 1:30PM to 3:30PM (ET)**

This 120-minute presentation will provide an in-depth explanation on the biggest and most crucial changes with the new version of the CCDC 2 'Stipulated Price Contract'. This includes the "Ready-for-Takeover" project milestone, provisions regarding early-occupancy by owner, how new provincial legislations like the Ontario Construction Act are addressed, and more. This presentation will also include a 30-minute Q&A period for attendees to pose their questions directly to some of the documents' authors.

### **Presentation 3: The new Division 01 - Sessions will be held each weekday from November 16 to 27 at the following times 11:00AM – 12:30PM (ET) and 4:00PM to 5:30PM (ET)**

This 90-minute presentation will introduce the brand-new Master Specification for Division 01 'General Requirements'. Attendees will learn about the key provisions of this new document and how to get the most out of its use. This presentation will also include 15 minutes for a Q&A period for attendees to pose their questions directly to some of the documents' authors.

### **Presentation 4: The top five questions (Pre-recorded, you may review at your convenience)**

This final presentation will be 60 minutes in length, and feature members of the CCDC committee answering some of the most important questions received during the various sessions of the second and third presentations.

Registrants are welcome to select any session to attend, but it is recommended that attendees register for specific sessions based on their region to ensure that the Q&A period is more relevant to everyone's local practices. These regional recommendations can be found [here](#).

### **FEES:**

The registration fee for the training is \$400 plus applicable taxes, with a \$150 discount for each additional registrant from the same firm. This includes access to all four presentations and copies of the new CCDC 2 and Division 01 documents, an approximate value of \$400.

### **REGISTRATION:**

Each session will be capped at 50 attendees on a first-come, first-serve basis. Don't miss this unique opportunity to hear directly from CCDC document authors. [Register today!](#)

Please send any questions regarding this online training to [info@ccdc.org](mailto:info@ccdc.org).

CCDC documents are developed through a consultative process with representatives from all sectors in the construction industry. These consensus-based documents carry the endorsement of the four constituent national organizations:

Association of Consulting Engineering Companies – Canada (ACEC)  
Canadian Construction Association (CCA)  
Construction Specifications Canada (CSC)  
The Royal Architectural Institute of Canada (RAIC)

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• Email: [info@csc-dcc.ca](mailto:info@csc-dcc.ca) • WebSite: [www.csc-dcc.ca](http://www.csc-dcc.ca)





## SAVE THE DATE



**NOVEMBER 17-18, 2020**

1:00PM - 5:45PM (both days)



We are excited to announce the Saint-Gobain 2020 VIRTUAL Architectural Symposium! This unique event includes two afternoons of remote CEU education, keynote addresses by two special guests, and a virtual showcase of our products and innovations.

Be on the lookout for an email invitation, set to arrive on or around October 8, which will include registration information, CEU course details, and the announcement of our keynote speakers.

## Articles of Interest

### Scientists Create Clear, Glass-Like Material Out of Wood

Sourced from: <https://futurism.com> / Victor Tangermann

Heating and cooling a home is costly, and inefficient building materials often make a house's carbon footprint even worse.



#### Kicking Glass

It's a lucrative concept that has drawn the attention of multiple research teams across the globe, all working on similar concepts.

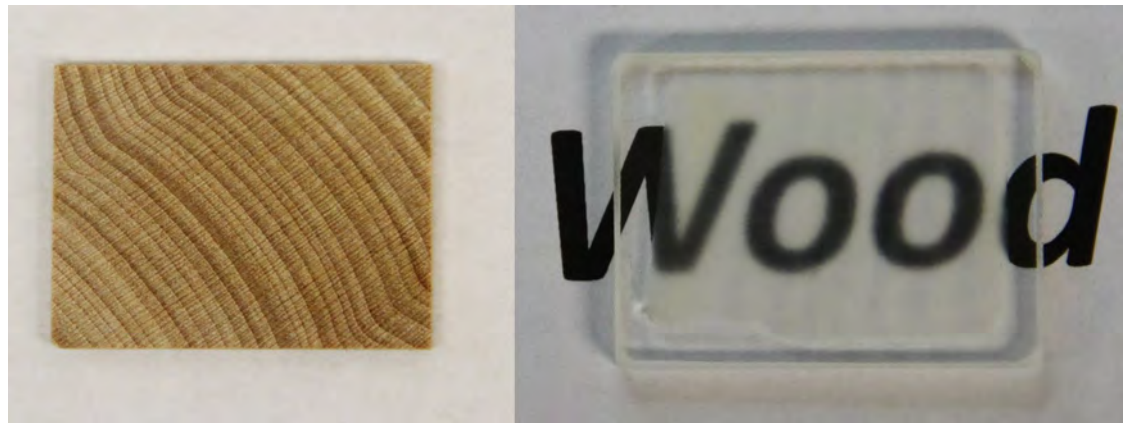
"I started out as an architect and in the 1980s I also became a developer," Geller said. "I wanted to have more control over the process of designing and building a project."

The problem with conventional glass is that especially in a single pane configuration, it's a terrible insulator. Producing it can also come with a heavy carbon footprint, emitting about 25,000 metric tons per year, according to a recent statement by the US Department of Agriculture (USDA).

In their paper published in the Journal of Advanced Functional Materials, the researchers claim their transparent wood result in windows five times more thermally efficient than glass.

#### Going Green

Creating the novel material is also a far greener process. For one, it's made from the sustainable, fast-growing balsa tree. The wood is oxidized in a special bleach bath and then penetrated with a synthetic polymer.



The resulting material is not only virtually transparent, it acts more like plastic – it can withstand impacts much better than glass and tends to bend and splinter like wood instead of shattering into pieces.

Color the USDA impressed.

"With all of these potential benefits for consumers, manufacturing and the environment, the case for transparent wood couldn't be... clearer," reads the statement.



## Edmonton's ICE District Wins Global Project Award

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

EDMONTON – Projects for Edmonton's ICE District were awarded the Global Best Project Award in the Retail/Mixed-Use Development category by Engineering News-Record (ENR). The international competition highlights project teams for the best design and construction achievements.



The awards accepted submissions from projects that were completed between January 2019 and April 2020. ENR stated that despite COVID-19 uncertainty, a record number of entries were received from countries around the globe including Australia, Ireland, Sri Lanka and Moscow, highlighting the significance of Edmonton projects winning in such an esteemed category.

“Stantec Tower, JW Marriott

Edmonton ICE District and The Legends Private Residences were all designed to draw residents to the vibrant downtown core of Edmonton,” said Tim Shipton, senior vice-president of communications and government relations with ICE District. “These towers have transformed the urban fabric in downtown Edmonton, and we are very proud that their design teams have received well-deserved recognition for their efforts.”

JW Marriott Edmonton ICE District and The Legends Private Residences, which occupies the top 34 floors of the tower, held its ground-breaking in 2016 and reached project completion in October 2019. Construction on Stantec Tower started in 2015 and reached completion in 2019.

According to ICE District, the project teams innovated by implementing safety measures for inclement weather and mitigated construction risks for working at heights. The teams also developed safety programs to protect workers and the public.

The competition was judged by an advisory committee made up of industry veterans who weighed safety performance, innovation, challenges, design and construction quality.

The JW Marriott Edmonton ICE District and The Legends Private Residences were developed PCL Construction, EAD Property Holdings Corp, DIALOG Alberta Architecture. Stantec Tower was developed by Stantec Architectural, which managed the design, engineering and construction.

Stantec Tower, which was sold to German real estate investor Deka Immobilien in early 2019, is the tallest building in Canada outside of Toronto. JW Marriott Edmonton ICE District is only the third JW Marriott property in Canada.

## Sand, a Surprisingly Limited Resource

Sourced from: <https://www.buildinggreen.com> / Candace Pearson

After water and air, sand is the next most-consumed natural resource in the world, according to the United Nations Environment Programme (UNEP). Though a visit to the beach may make this material appear abundant, this resource – used to manufacture nearly everything from plastics to microchips –

is actually under serious stress worldwide, and the building industry is a main perpetrator.

The extent of the crisis is largely invisible, especially to a U.S. public used to beach vacations on glistening white sand. But those endless shores and tall dunes you might have enjoyed in New Jersey or Miami were likely constructed out of sand trucked in from inland mines or dredged from the ocean floor just in time for summer. The reality is that 75%-90% of the world's natural sand beaches are vanishing, including many of those on U.S. coastlines.

Suction pumps are being used in this riverbed to completely denude this area of sand / Photo credit: Sumatra Abdulai



Supply is the first problem. Whereas rivers would typically carry tons of new sand to the oceans every year, dams and sea walls have hampered that sediment flow. Add erosion caused by human development, sea level rise, and increasing storm activity, and the beaches lose the ability to repair themselves. Many low-lying barrier islands are already submerged, and well-meaning efforts like sea walls can reflect waves back to shore and erode beaches faster.

The second problem is demand. People use more than 40 billion tons of sand and gravel

every year, 80% of which goes to the construction industry, mostly to produce concrete. Desert sand can't be used for most industrial purposes, including concrete, because the wind makes the grains too smooth to bind together well. Instead it is taken from riverbeds, lakebeds, and beaches around the world – to the point where some are stripped bare – or vacuumed up from the ocean floor where the activity wreaks havoc on marine ecosystems, in addition to altering ocean currents that can pull beaches more rapidly out to sea.

In the United States, sand has become a billion dollar annual business, according to The New York Times – big enough to fight off marine protection suits when they arise and to slow down regulatory efforts. Internationally, illegal mining is not only common, but in India has led to the emergence of what is called “sand mafias,” groups that have reportedly killed hundreds of people in their attempt to protect their illegal operations.

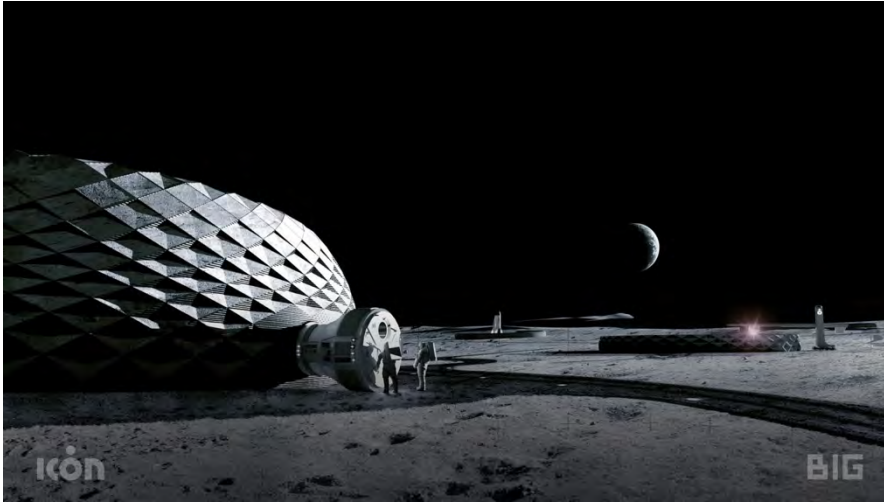
With the demand for sand only expected to increase, marine biologists have called for better conservation plans for shore and coastal areas, as well as for purchasers to extend responsible sourcing to this most basic material. “Sustainable sand” policies have been written in some countries, including India, but they are a long way from being common and enforced.

Both glass and concrete can be ground back into to sand, but the recycled waste stream doesn't come close to supplying sand at a rate or cost to compete with illegal and legal, but environmentally damaging, mining. Some U.S. companies have successfully experimented with recycled glass as a sand and cement replacement; greater awareness of the sand issue in the building community could lead to stronger interest in such products.

## BIG and NASA Collaborate to Design 3D-Printed Buildings for the Moon

Sourced From: <https://www.dezeen.com> / Eleanor Gibson

BIG and 3D-printed building company ICON have revealed they are working on Project Olympus, which aims to develop robotic construction for the moon.



The architecture firm and SEArch+ (Space Exploration Architecture) were enlisted for the project by ICON after it received a Small Business Innovation Research (SBIR) government contract boosted with funding from NASA.

Called Project Olympus, it aims to develop a way to create a 3D-printed infrastructure for living on the moon using materials found on its surface.

"With ICON we are pioneering new frontiers – both materially,

technologically and environmentally," said BIG founder Bjarke Ingels.

"To explain the power of architecture, 'formgiving' is the Danish word for design, which literally means to give form to that which has not yet been given form," Ingels added.

"This becomes fundamentally clear when we venture beyond Earth and begin to imagine how we are going to build and live on entirely new worlds."

Working with NASA's Marshall Space Flight Center in Huntsville, Alabama, the team will use a simulant of moon soil to investigate a 3D-printable construction.

While other projects have suggested inflatables or metal structures, Project Olympus is intended to create a robust construction suited to the environment on the moon. The team said that by using 3D-printing and local materials it will also be more sustainable and reduce waste.

"We have explored various building forms ideal for containing atmospheric pressure and optimised for protection from cosmic and solar radiation. "

"The habitat will be designed with the inherent redundancy required for extraterrestrial buildings, while also using groundbreaking robotic construction that uses only in-situ resources with zero waste left behind."

In time, Project Olympus could also offer a more sustainable example for building on earth, according to the team.

"3D printing with indigenous materials is a sustainable and versatile solution to off-world construction that will prove to be vital to our future here on Earth and in Outer Space," SEArch+ added.





"With the technologies and efficiency parameters developed for the construction of extraterrestrial buildings, Project Olympus will also help us to build sustainably on planet Earth as we strive to reduce the carbon footprint of the built environment," said BIG partner Martin Voelkle.

ICON received the government grant for off-Earth exploration after working to develop more sustainable construction using 3D-printing robotics, software and advanced materials. In 2018, it completed its first 3D-printed home in the US and has recently started construction on "the world's first 3D printed community of homes" in Mexico.

Structures will be built using robots



It selected BIG, which has previously designed a simulation of Mars called Mars Science City in Dubai, and SEArch+, for Project Olympus.

"Building humanity's first home on another world will be the most ambitious construction project in human history and will push science, engineering, technology, and architecture to literal new heights," said ICON Co-founder Jason Ballard.

The project forms part of NASA's commitment to exploring life on the moon,

which includes the Artemis program to place the first woman and next man on the astronomical body in 2024. Earlier this year, NASA named Jeff Bezos's Blue Origin, Elon Musk's SpaceX and Alabama-based Dynetics as the three teams to develop vehicles for the planned landing.

The space agency also ran the 3D-printed Habitat Challenge, which tasked architects and designers to conceive 3D-printed homes for deep space.

A number of architecture firms are also exploring building on the moon.

Last year, SOM revealed it had teamed up with the European Space Agency (ESA) and Massachusetts Institute of Technology (MIT) to design the inflatable Moon Village as "the first permanent human settlement on the lunar surface".

In 2017, British firm Foster + Partners unveiled a proposal to 3D print buildings on the astronomical body. More recently, a collection of projects visualised life on the moon for the competition Moontopia.



## CWB Welding Foundation Invests in High School Welding Education

Sourced From: <https://canada.constructconnect.com> / Peter Caulfield

Twenty-two high schools across Canada recently received a total of more than \$1.9 million so they could improve and enhance their welding programs.

The money came from the CWB Welding Foundation's (CWB) Capital Equipment and Consumables Fund, plus co-investment from partner organizations.



The funding enables recipient high schools to complete such improvements as installing additional welding booths/stations, upgrading ventilation systems and purchasing steel, and doing it before schools re-opened in September.

CWB executive director Susan Crowley says most high schools undertake their welding shop upgrades in the summer, while school is on its annual two-month break.

"Some schools have had to change their plans or the timing of the work due to the impact of COVID-19 – from the implementation of physical distancing directives and the cost and availability of materials and labour – but it's important to be ready to deliver effective welding instruction when schools re-open," said Crowley in an announcement.

Edward Milne Community School in Sooke, B.C. (near Victoria) is one of the recipients of CWB funding.

The school's welding program is making good use of the money, says dual credit welding instructor Mathew Harmeson.

"CWB provided us with machines and a stable supply of consumables (welding supplies)," said Harmeson. "It also matched the school district's support of \$25,000."

The school now has all it needs to run its welding program, he says.

Edward Milne's welding students will be busy building mini jet boats this year. When completed, the vessels will either be sold or used by the students themselves.

"As of this September (2020), they have all been spoken for," said Harmeson.

Ryan Edgar, a teacher at Argyle Secondary School in North Vancouver, says the school received "a huge grant" from CWB to install six new welding booths at the new building to which Argyle is moving in a few months.

"The school district is a strong promoter of the trades," said Edgar. "Every school in the district has an area set aside for metal work and Argyle has a dedicated welding shop."

Welding is a popular subject at Argyle, which enrolls about 60 welding students per year.

CWB, the source of the funding for the schools' welding programs is a national charity that was founded in 2013. It makes use of support from industry and community organizations to address the welding skilled trade shortage in Canada.



According to the CWB website, its education-based programs and initiatives reduce barriers that affect such key groups as elementary, secondary, and post-secondary students and educators; Indigenous people; women; and the underrepresented.

“We envision a future where all individuals are encouraged and given the support they need to reach their true potential in a career in welding.”

Based on CWB’s best estimate, there are about 350 welding programs in Canadian secondary schools and approximately 90 in post-secondary institutions, such as BC Institute of Technology (BCIT) which offers three welding programs: Welding Foundation, Welding Level A and Welding Level B.

All the programs are being offered this academic year, says James Cai, Associate Dean of Industrial Construction in BCIT’s School of Construction and the Environment.

“Normally, we have 112 welding seats per year,” said Cai. “Due to COVID-19, we reduced capacity by 50%, to enable social distancing, so there are 56 seats this year. Once the pandemic is over, we’ll go back to 112 seats per year.”

This year’s welding program at BCIT combines online and shop learning, with 80% to 90% of instruction taking place in the shop.

Cai says the demand for graduates of the welding program is high and growing.

“They find employment in a number of different sectors, such as shipbuilding, manufacturing and construction,” he said.

Not to mention education.

Nicole LeClair, a welding engineering technologist in Burlington, Ont., is a welding professor at Sheridan College and Mohawk College in Ontario.

“I’ve been a welder since 1998,” said LeClair. “After graduating from high school, I started an Arts degree, but dropped out when I realized I didn’t enjoy it.”

She took a night class in welding at Algonquin College in Ottawa, liked it and took more courses in the subject, finishing with a Diploma in Welding Engineering Technology at Conestoga College.

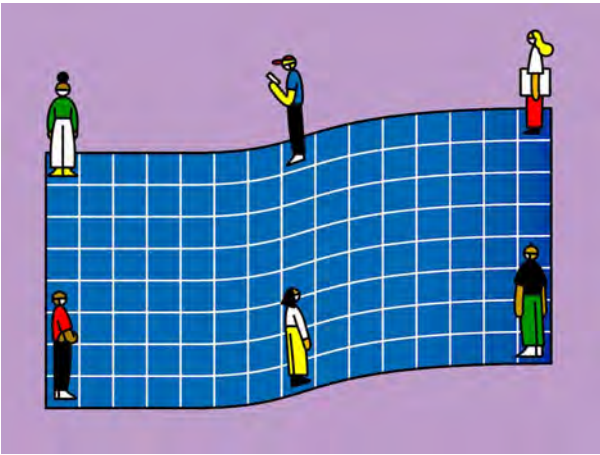
“It’s been a good career for me, and it’s a good career for young people, including young women, because there’s a need for welders now,” said LeClair. “Women make good welders because of their attention to detail. And they’ve already entered the trade. Women make up about 4% of everyone employed in construction in general, but 9% in welding.”

## **The 6-Foot Rule Will Guide Architects in a Post-Covid World**

Sourced From: <https://www.bloomberg.com> / Kristen V Brown / Illustration: Rose Wong for Bloomberg Businessweek

Six feet. As Covid-19 has torn through the world, that distance has come to define daily life. Six feet is how far we stand from other shoppers or the space we try to maintain while catching up with a friend.

It’s painfully clear that our world has been constructed for a reality that no longer exists. Crowded subway cars, packed restaurants, and bustling sidewalks all pose a threat every time someone nearby sneezes, talks, or even just breathes.



Eventually, architects and engineers will reconstruct the world around us to take into account the pandemic – and others that may follow. Temporary plexiglass barriers and markings on the floor may give way to designs that favor privacy and small groupings of people to limit the spread of pathogens. “You’re going to see a style where things look safe to reassure people,” says Aaron Betsky, Director of Virginia Tech School of Architecture + Design. “We’re going to make things that reassure people that there’s not something hiding somewhere that’s going to come out and bite them or make them sick.”

Betsky suspects we may see a resurgence of the aerodynamic and streamlined design of the 1920s and '30s, a time which brought us, among other things, hospital rooms with rounded corners, making them easier to clean. The reimagining of cities and architecture in the wake of pandemics has been going on for centuries. In the 1800s, after cholera killed tens of thousands of Parisians, Georges-Eugène Haussmann razed overcrowded medieval neighborhoods to make way for the wide avenues and parks we know today.

The trouble is that the science informing our decisions about how to redesign our public spaces is rudimentary at best. Studies in the early 20th century argued that infectious droplets fell within a few feet, in line with the 1-meter distance the World Health Organization recommends as safe today. But a 2003 study of SARS, a coronavirus closely related to the one that causes Covid-19, indicated that droplets can spread farther. It showed that SARS could be transmitted to others as far as 6 feet away from an infected person while traveling on an airplane. The Centers for Disease Control and Prevention recommends maintaining a distance of at least that – or “about two arms’ length” – from other people.

The latest thinking is that the disease spreads both via large droplets that fall to the ground and tiny airborne ones. “It’s a continuum,” says Lydia Bourouiba, an epidemiologist who studies fluid dynamics at MIT, whose recent work demonstrated that “turbulent gas clouds” can carry pathogens 27 feet. She was among 239 scientists who signed an open letter to the WHO urging the organization to consider airborne transmission of Covid-19 in its guidelines. The agency recently updated its advice to say the virus can be airborne in poorly ventilated, indoor spaces.

Variables such as temperature, humidity, and airflow can all affect how effective that 6-foot distance really is. Indoors, without a mask, 6 feet isn’t really all that safe, says Gabriel Isaacman-VanWertz, a scientist at Virginia Tech who studies the way particles change in the atmosphere.

It’s also not known whether the smaller droplets actually contain enough virus to be infectious. The answer, says Isaacman-VanWertz, is somewhere between “maybe” and “probably.”

And so we’ve begun to rearrange our activities in the world we built before Covid-19. At stores, 6-foot spacing is marked on the floor and many parks have painted white circles on the ground to designate where to sit.

Safety, of course, isn’t the only factor in deciding the right amount of social distancing, says Isaacman-VanWertz. We need to be able to maintain some semblance of economic and social activity. It would be hard to do that at 27 feet. Still, “what almost any researcher would agree on,” he says, “is that the farther away you can be, the better.”

**BOTTOM LINE** - The pandemic is likely to kick off a new era of architecture and design that accommodates wider distances between people. That may make us feel safer, but it may also be more alienating.

## ASSOCIATION LINKS

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

## ASSOCIATION LIAISONS

Alberta Association of Architects (AAA)

<http://www.aaa.ab.ca/>

Alberta Painting Contractors Association (APCA)

[www.apca.ca](http://www.apca.ca)

Alberta Roofing Contractors Association (ARCA)

<http://www.arcaonline.ca>

[info@arcaonline.ca](mailto:info@arcaonline.ca)

American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)

<http://www.ashrae.org/> / [ashrae@ashrae.org](mailto:ashrae@ashrae.org)

The Canadian Wood Council (CWC)

<http://www.cwc.ca>

[info@cwc.ca](mailto:info@cwc.ca)

Portland Cement Association

[ConcreteTechnology@cement.org](mailto:ConcreteTechnology@cement.org)

Interior Designers of Alberta

[www.interiordesignalberta.com](http://www.interiordesignalberta.com)

Alberta Painting Contractors Association (APCA)

[www.apca.ca](http://www.apca.ca)

Association of Professional Engineers, Geologists, and Geophysicists of Alberta (APEGGA)

<http://www.apegga.org/> [dward@apegga.org](mailto:dward@apegga.org)

Association of Science and Engineering Technology Professionals of Alberta (ASET)

<http://www.aset.ab.ca/>

Russ Medvedev, [russm@aset.ab.ca](mailto:russm@aset.ab.ca)

Building Owners and Managers Association (BOMA)

<http://www.bomaedmonton.org/> / [edmonton@boma.ca](mailto:edmonton@boma.ca)

Consulting Engineers of Alberta (CEA)

<http://www.cea.ca/> [info@cea.ca](mailto:info@cea.ca)

Edmonton Construction Association

[www.edmca.com](http://www.edmca.com)

[contact@edmca.com](mailto:contact@edmca.com)

Terrazzo, Tile & Marble Association of Canada (TTMAC)

<http://www.ttmac.com/>

[association@ttmac.com](mailto:association@ttmac.com)



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## 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@cscdmonton.ca](mailto:information@cscdmonton.ca) and we will be quick to get back to you!

Open Positions Include:

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...















### **\*\*Important Update \*\***

**Alberta Infrastructure's Technical Resource Centre (TRC) is relocating to the new Alberta.ca platform. It is very similar to the old site, with the largest change being formatted to the new corporate identity style. Almost all of the documents on the new site are still in the same organization as the old site.**

The old TRC site (<http://www.infrastructure.alberta.ca/500.htm>) will be non- operational as of February 1st, 2020.

Please update any links to pages and/or documents that you have to the new location. The new TRC site is located at <https://www.alberta.ca/infrastructure-technical-resources.aspx>

## The Executive

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