edmonton
the 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.

September 2020 Edition | Editor: Tracey Stawnichy

In This Edition...

Annual Chapter Meeting

Date: Tuesday, September 15, 2020

Time: 5:30pm – 7:00pm

Location: Online

This is a member's only event

As you all know, COVID-19 put a bit of a wrench in all events and how organizations and companies move forward. After initially cancelling our ACM in hopes of having a face-to-face event in the coming future, the Edmonton Chapter has decided to attempt to host our first online event.

As such, we welcome all chapter members to attend the very first online Annual Chapter Meeting. As a member you will have the opportunity to learn of the initiatives and accomplishments the Chapter has done in the past year and meet the upcoming Chapter Executive. for the 2020 - 2021 Season.

Please register with Eventbrite here:
https://www.eventbrite.ca/e/csc-edmonton-chapter-2020-acm-tickets-108917430968

A Zoom meeting invitation, along with the Agenda, will be sent out to registrants on September 14th. The Edmonton Chapter Executive looks forward seeing everyone virtually!

2020 / 2021 Edmonton Chapter Executive

Director	Tracey Stawnichy	780 994 3699
Chairman	Andrew Brassington	587 341 5268
Vice-Chairman	Dylan Leclair	587 335 9552
Secretary	Jessica Prosser	587 340 7169
Treasurer	Catherine Osborne	780 486 6400
Architect	Position Open	
Chapter Liaison	Position Open	
Education	Mike Ewaskiw	780 237 7844
Engineer	David Henriquez	780 669 0504
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	Brent Akins	780 995 8501
Membership	Joseph Trivellin	587 785 6484
Newsletter	Tracey Stawnichy	780 994 3699
Specifications	David Watson	780 758 4147
Website Administrator	David Watson	780 758 4147
Trade Contractor	Skip Helfrich	780 903 0595
Program	Kyla Keller	780 643 3233
	Jessica Prosser	587 340 7169
Owner's Rep	Cam Munro	780 231 1739
Sustainability	Darlene Helfrich	587 930 3432
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;
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$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
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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 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

Hello Chapter Members!

Welcome to Fall 2020. I know it feels like it took a long time to get here. Just like the leaves, times are changing.

Although we are not moving at the pace that we may have expected when I took over in May, if we continue to work together we will soon see the light at the end of the tunnel.

That being said, we still have a few more virtual events in our future for now.

Please tune into the ACM on September 15th at 5:30PM. Feel free to message myself or the anyone on the Executive for more details.

Look for some potential in person events later this year. We will continue to observe local guidelines in regards to COVID-19 and all events planned will have this taken into consideration.

As always, we welcome feedback from our members. Please send any thoughts my way and they will be addressed accordingly.

I look forward to seeing you all in person soon. Have a great Fall!

Membership in CSC

Joseph Trivellin, CTR

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

DESIGN TEAM

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

BUILDING TEAM

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

SUPPLY TEAM

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

THE STUDENT

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

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

Fresh Faces (New Members)

None this month.

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

Catherine Osborne (nee Boyd)
cosborne@aci-arch.com

Ibrahim El-Hajj, M.Sc. Arch, BCQ, OAA
Building Envelope Consultant
I.E. Architects
Tel: 289-234-5657
Email: info@iearchitects.ca
Website: www.iearchitects.ca

Previous Members Re-Joining / Re-Activated

None this month.

CSC Education:

Mike Ewaskiw, CTR

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

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

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

Contact Mike for all your education needs.

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

EDUCATION COURSES

Upcoming Classes:

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

Upcoming Classes Online:

Principles of Construction Documentation (PCD) – TBD
Technical Representative (TR) – TBD

Upcoming Workshops:

Principles of Construction Documentation (PCD) 5 Day Workshop – 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

Not All Parks Should be Green: 10 Tips to Design Landscape Infrastructure

Sourced from: https://www.archdaily.com

Does it make sense to design green parks in desert cities such as Casablanca, Dubai, or Lima? Ostensibly it does, because they contribute freshness and greenness to the urban environment. In exchange, however, they disrupt native local ecosystems, incur high maintenance bills, and begin a constant struggle to ensure water availability.

We conversed with Mariam Garcia Garcia, founder of the Spanish-based LandLab and former general director of Urbanism and Territorial Planification of the Autonomous Government of Cantabria, Spain. "Park is such a weird word. We should talk about landscape projects," she says, indicating that greenness and parks are old-fashioned concepts.

In this conversation, Garcia summarizes the challenges these landscape projects face — from the climate emergency to responsibilities to the ecosystem. "We should move forward from the idea of the garden to the idea of landscape infrastructure," says Garcia.

.1 Parks should maximize the resources from their natural environment.

"Parks can provide comfort to citizens even within the range of available ecosystems in the area. They can work within them to maximize the available resources of their particular context. Specifically, they should utilize resources related to water availability and soil fertility."

.2 Sustainability criteria should define the landscape layout – not the other way around.

"Parks and water work, metabolically, as a building. The metabolic functioning of the park should follow the sustainability criteria so that the appearance – what the user will perceive – is consistent with that operation. If you can do it with a sustainable building in a desert climate you can also do it with a park," says García García.

.3 In a desert climate, a landscape project must fertilize.

"Fertilizing an area is not turning it green, but rather fostering its phenomenological and ecosystem diversity through landscape elements. That fertility can bring an environment at maximum desert aridity up to the highest humidity. To this end, you could collect, store, and purify water. From there, you start working with an ecological succession of species that perhaps at a certain point can form a small forest mass, because they are linked to a network of ditches or water taken from an irrigation well," speculates García García.

.4 Austerity is not the only solution for desert climates.

"I do not think you have to defend the austerity of the desert at any price. You can capture the humidity and the little water available on the site to irrigate. Today we are just beginning to link green infrastructure vocabulary to specific typologies," says García García.

.5 Not all parks should be green.

"The solution to ecosystem and climate problems does not imply necessarily that all parks based in a desert climate should be yellow, but that the embedded creativity of ecology alongside the ethics of sustainability – to which we all are subjected by in this Anthropocene context – are the ones that should generate the innovation in a landscape project. This will be revealed not only in its formal and vegetative appearance but also in those infrastructures that make that possible," stated García García.

.6 Consider the climatic conditions of the project in 2069.

"As a species, we are in a critical situation facing two planetary boundaries. One is the conditions that have allowed life on earth in the Holocene. The other is climate change: a project should consider whether the site is trending towards a shortage of water resources within 50 years and the general trend of climatic conditions."

.7 …and design the project having 2119 in mind.

"A park is not planned for today, but for continued existence over the next 100 years so that it can follow the evolution and succession of the species. The issue we have is that our landscape designs take longer to build than buildings. Therefore, time is a fundamental variable from the beginning of the project. "

.8 Every landscape project should stimulate biodiversity.

"Another of the planetary limits that is in crisis is the loss of biodiversity. That means that any landscape project should tend to improve biodiversity, that is, as much as possible and within the ecological successions that can be achieved."

.9 A park is infrastructure.

"I believe that parks are public landscape infrastructures. We must move from the concept of the garden to the idea of the landscape as infrastructure. Moving from the concept of the garden as an object to that of the park as a machine of infrastructure will reconnect a place with its context. "

.10 Landscape infrastructure delivers ecosystem benefits.

"A river, for example, is also landscape infrastructure: an ecological corridor that deposits sediments that fertilize the land and displays multiple ecosystem benefits. It allows the growth of flora and fauna and therefore ensures that there is food or species that can migrate. That is, when a landscape is functioning as infrastructure, it allows the flow and exchange of matter and energy. This is called autopoiesis: the capacity of self-organization that systems have to adapt, fertilize, and survive.

The Role of Architecture in Fighting a Pandemic

Sourced from: https://www.bostonglobe.com / Michael Murphy

If spaces can be purposefully designed, they can assist in the prevention, containment, and treatment of infectious disease, including COVID-19.

When an epidemic of extensively drug-resistant tuberculosis emerged in Tugela Ferry, South Africa, in 2006, it was a building that deserved some of the blame.

The mode of transmission – particles so small they suspend in the air, easily inhaled by patients in a poorly ventilated hospital with overcrowded waiting areas – was proof that something spatial was afoot. As one health care director stated, the hospital was not designed for infection control, and people died because of it.

Such a diagnosis points to the unique role architecture plays in contributing to a cure: If spaces can be purposefully designed, they can assist in the prevention, containment, and treatment of infectious disease, including COVID-19.

Three epidemics of the recent past have something to teach us about how architecture can help fight the spread of the novel coronavirus, especially as we look at their primary modes of transmission: air, surfaces, and water.

There is concern that the coronavirus is aerosolized, meaning, like the bacteria that causes TB, it can

remain suspended in the air and be inhaled by others. Thus, airflow emerges as both a problem and a solution to design for. Epidemics like the XDR-TB outbreak in Tugela Ferry teach us that in medical and nonmedical spaces, simple retrofits can help. Opening windows, increasing air movement, introducing filters, and turning on fans could mean the difference between safety or sickness. Avoiding closed-off hallways, waiting areas, and other spaces designed without airflow in mind – or, if possible, keeping people outdoors – while maintaining safe distancing can also radically help. As we turn our homes, offices, kitchens, and dormitories into COVID-19 triage centers, simple rules of thumb around airflow could greatly help us.

While the Centers for Disease Control and Prevention hasn't found a link between COVID-19 transmission and US municipal water, in various parts of the world other outbreaks have been traced to poor water hygiene. In Haiti, water contaminated by waste found its way into sources used for drinking, washing, and cleaning, resulting in a cholera outbreak in 2010. Emergency relief tents – while essential to meet demands for sick patients – continued to dump contaminated waste into the groundwater, making an emergency disaster into a permanent one.

In Port-au-Prince, doctors and architects worked together to build a new, permanent local facility that cared for patients, safely treated wastewater and hazardous materials, and provided potable water for the community. The solution leveraged relief dollars meant for tents and used them to build a center that managed waste, which helped aid the crisis and the recovery. We need designers on the ground to question the long-term implications of the spatial decisions we are making now to help prepare us to fight the next epidemic. We will have the same urgent needs in our relief for COVID-19.

In 2014, Ebola presented another spatial problem: a highly contagious virus that could survive on surfaces for nearly two weeks. Though stricter infection protocols and new health-worker safety measures were the primary strategies, architects played a role by renovating isolation units, creating innovative ventilation strategies, and designing pathogen-resistant surfaces that helped to keep the disease from spreading.

While typical infection-control protocols in hospitals have advocated for years to make every surface antimicrobial and to reduce the porosity of fabrics to prevent the spread of pathogens, in this case, porosity could be our ally. Studies are showing that coronavirus is more stable on plastic and steel (up to three days) than on porous fabrics like cotton, leather, and even cardboard (less than 24 hours). Designers are needed to question guidelines we have made for previous diseases in the face of new ones that may have different properties.

In each of these previous epidemics, space mattered. Buildings played an outsized role in the spread of infection – and redesign efforts played a key role in stemming the tide of a pandemic. Whether it's providing ample, clean airflow to decrease the presence of contagion, building effective systems to separate waste from water, or designing spaces conducive to infection control, architecture can and should do its part to fight pandemics.

As the world continues to grapple with the coronavirus outbreak, never before in modern times have we needed more hands on deck, and from across all disciplines. When it came to Ebola, infectious disease specialists and scientists open-sourced their work in the interest of public welfare, forgoing the academic norm of holding data close to the vest. This type of collaboration was vital to turning the tide on one of the world's most virulent pathogens and is a prescient sign of what will be required to respond to the current crisis.

Architects and designers stand at the ready to do their part. We can see the results of an all-hands-on-deck mentality with the temporary medical clinic established outside of Southampton Street Shelter in the South End, where non-profit, government, design, and construction organizations all came together to design, build, and run a pop-up clinic in less than a week.

Our present-day situation marks a moment that will surely change the way we consider designing and building the spaces we need in the future. Architecture has been relegated as a passive backdrop, but if it is deployed as an active agent in the fight against the coronavirus pandemic, we can recapture trust over our public spaces and solve problems. The spatial choices we make today, during this emergency, might make or break our ability to survive both this crisis and the next one.

A Construction Company Embraces Frank Talk About Mental Health to Reduce Suicide

Sourced from: https://www.wbur.org

RK, a construction company, has made mental health a part of its regular toolbox talks, in which employees hear from managers and get a chance to stretch.

It has been five years, but the memory still haunts construction superintendent Michelle Brown.

A co-worker ended his workday by giving away his personal cache of hand tools to his colleagues. It was a generous but odd gesture; no one intending to return to work would do such a thing.

The man went home and killed himself. He was found shortly afterward by co-workers who belatedly realized the significance of his gifts.

"It's a huge sign, but we didn't know that then," Brown says. "We know it now."

The suicide of that construction worker for RK in 2014 became a pivotal event for the company, shaking its 1,500 employees, including co-owner Jon Kinning.

The death brought home some painful facts. Construction and mining (including oil drilling) have the highest suicide rates of all occupations, according to data from the Centers for Disease Control and

Prevention. And the suicide rate for working-age adults has been rising in the U.S., increasing by 34% to 17.3 suicides per 100,000 in 2015 from 12.9 in 2012.

Kinning spent the months after the incident meeting with industry leaders and suicide experts.

The result: RK, which was founded 56 years ago by Kinning's father, eventually put together what is now regarded as a model for suicide prevention in the construction industry. It involves 24-hour access to counseling services, lenient leave policies and crisis training for managers, among other things.

Most critically, says Kinning, the company embraced lots and lots of open talk about mental health.

"It's a crisis in our country. It's a crisis in our business," Kinning says. And it required rethinking the entire business.

"If somebody didn't show up in the past, we'd be like, 'You've got a job to do — get in here,' " he says. "We've just changed our tone and our culture. I talk about mental health nearly every time I have a group of employees."

That outreach has prompted workers to take advantage of therapy and other benefits. "We've averted probably 15 suicides since 2014," says Kinning. "That's a pretty good success rate."

Other companies – in construction and in other industries that also face high suicide rates – are now copying RK's approach.

But the struggle is ongoing. Risk factors for suicide in the industry are still numerous, and even RK is not immune to them.

Most construction workers are young and middle-aged men – the same population that is likely to die by suicide. Unhealthy substance use runs high, especially where opioids are prescribed for workplace injuries. Lots of military vets work in construction, and many struggle with past trauma.

That has been a factor for Brown, the RK superintendent, who spent four years in the Air Force. She currently works on a new airport project in Salt Lake City.

Her hard hat bears the name "Momma," a testament to the caring relationships that Brown, affable and cherub-cheeked, cultivates at work.

Three years ago, she noticed an emotional decline in one of her workers, a fellow vet she was close to. He would alternate between being unresponsive and being extremely agitated.

One morning, he didn't show up for work and he hadn't called in sick. That put Brown on high alert. Given her past experiences, she immediately suspected that he was suicidal.

Her suspicions were confirmed when she reached him by phone. "Don't hang up," Brown implored, as she drove to his house.

When she got there, she found him drunk, with a firearm in hand.

"It took me back to a time in my life where, if somebody hadn't reached out to me, then there's a possibility I wouldn't be here," she says through tears. "I had no desire to be on this earth anymore. I didn't think it was worth it. Why bother? And somebody took the time to notice my behavior and reach out to me."

Brown soothed him with the words that had helped her: "You're loved. You're needed." She called a therapist, then eased him into medical leave, as RK had trained her to do.

"I wasn't going to lose him if I could help," Brown says.

In that instance, the man survived, and they remain close, even though he has since left RK.

But over the course of 31 years working in construction, Brown says, she has endured three coworkers' suicides. Each case rocked everyone around them. But in those days, she says, the topic was never up for discussion.

Fast-forward to today; it's the polar opposite. RK highlights mental health two to three times a week during what it calls toolbox talks, when workers gather for staff announcements and to stretch.

As much as RK spotlights mental health, it remains a difficult subject.

Kinning and other managers at RK say raising it feels awkward and uncomfortable. Some workers object to the constant focus, saying it raises unwelcome memories for them. But Kinning perseveres, telling them, "I think it's more important for the greater good to talk about mental health issues."

One recent morning at the Salt Lake City work site, about 60 RK workers dressed in neon safety vests gather around supervisor Nate Lewis.

"How many of you guys here have heard this talk before about mental health and awareness on the site?" Lewis asks the crowd. Nearly everyone raises a hand.

With his hands and legs visibly quivering, Lewis recounts his own depressive and suicidal episodes two years ago. Back then, overwork turned to panic and anxiety attacks. After years of objecting, Lewis finally sought therapy and turned a corner.

Lewis then opens the floor for anyone else to come forward. One man, citing his own experience, offers support to anyone struggling with addiction.

Then, from behind Lewis, a normally soft-spoken man approaches the circle. Cal, as he is known, introduces himself. His expression looks to be one of sadness mixed with terror. He apologizes for being nervous, then forges on.

"I have a suicidal past myself," Cal says. "I dealt with maybe six years of attempting to take my life. The last time that happened was last year in July."

From his bed at the hospital, he says, he wondered what kept him coming back to a death wish. "I ended up figuring out while talking to the therapist that I'm not being open about my feelings and my struggles," he says, including about being openly gay and, at times, unwelcome in the construction industry. He also didn't want to be judged for feeling depressed.

Being candid and sharing his experiences, he says, lightened his burdens.

"The last year of my life has been one of the happiest years I've ever experienced as an adult," he tells them. As he regains his composure, Cal is met with the applause and bear hugs of his fellow construction workers.

Greenspaces are Essential Infrastructure Experts Stress

Sourced From: https://canada.constructconnect.com

City of Toronto – Park People executive director Dave Harvey praised Toronto's Rail Deck Park concept, calling it 'absolutely vital' for the growing east-downtown community during a webinar on public greenspaces hosted by Toronto's Ryerson City Building Institute

Municipal planers should be treating parks in use in large cities during the COVID-19 pandemic as living laboratories offering valuable lessons on the way greenspaces should be planned in the future.

That was a key recommendation issued by panellists speaking during the Future of Public Space webinar presented recently by Toronto's Ryerson City Building Institute (CBI).

The parks experts also urged city builders to view greenspaces as fundamental pieces of infrastructure alongside roadways and water services and to take notes from bold active-transportation measures being implemented in Milan, Berlin and Mexico City during the crisis.

"I think everyone will agree that we've seen our parks and greenspaces used and appreciated like absolutely never before (during the pandemic)," said panellist Dave Harvey, executive director of the advocacy group Park People and former adviser to the Government of Ontario on the Greenbelt Act and growth plan policies.

"It's more commonly held now that parks are absolutely core urban infrastructure. It's not a nice little amenity, it's as essential as roads or water or sewers."

Harvey appeared with Dr. Anne Harris, an epidemiologist at Ryerson University with a research focus on active transportation. The moderator of the May 6 session was Cherise Burda, executive director of the CBI.

In another development the day of the webinar, the City of Toronto announced an outline for its new ActiveTO program, being developed "to provide more space for people walking and cycling as well as transit riders to allow for better physical distancing as part of the city's restart and recovery from the pandemic," according to a statement.

The statement said elements to be developed include creating quiet streets; using major streets for active transportation; and expanding the city's cycling network.

The panellists said Toronto has been late to the game in realigning city streets and sidewalks to keep citizens safe and encourage new active-transportation patterns.

"The one we know that's been making a lot of headlines is Milan, transforming 35 kilometres of streets to expand cycling and pedestrian space after the lockdown is lifted this summer, and many other cities are proposing similar measures," said Burda.

Vancouver has banned cars in Stanley Park to create more space for pedestrians and France has expanded roads for cycling during the pandemic and is also adding new cycling lanes along Metro subway lines as a new transportation alternative, Burda also noted.

In April, Harris and other signatories wrote an open letter to Toronto Mayor John Tory and Toronto Medical Officer of Health Dr. Eileen de Villa calling for more cycling and pedestrian space to achieve safe physical distancing during the pandemic.

Harris told the webinar audience that Toronto seemed to be leaning towards treating cycling and walking as optional modes of transportation.

“We wanted to make sure that it was understood that many people rely on sidewalks and bicycles for their essential transportation,” Harris said.

Harvey stressed that greenspaces must be viewed as essential to public health and that more sophisticated approaches to incorporating them into the fabric of the city must be developed, building upon such assets as greenspace corridors that have taken root in the city.

He praised the Green Line Hydro corridor parkland running from Davenport and Macpherson towards Earlscourt Park as a worthwhile City of Toronto initiative.

“Networks of parks and greenspaces and how we move around in a safe, creative way aren’t just nice to have, they’re needs to have,” he said. “We’ve done a good job in many parts around the GTA around this but as our city is becoming more and more dense we’re creating neighbourhoods that don’t have enough greenspace,” he said. “The lack of greenspace is a real significant issue that’s been highlighted by COVID.

“It makes things like the rail deck absolutely vital for that neighbourhood going forward.”

Scientists Turn the Common Brick into a Battery with Polymer Coating

Sourced From: https://www.globalconstructionreview.com

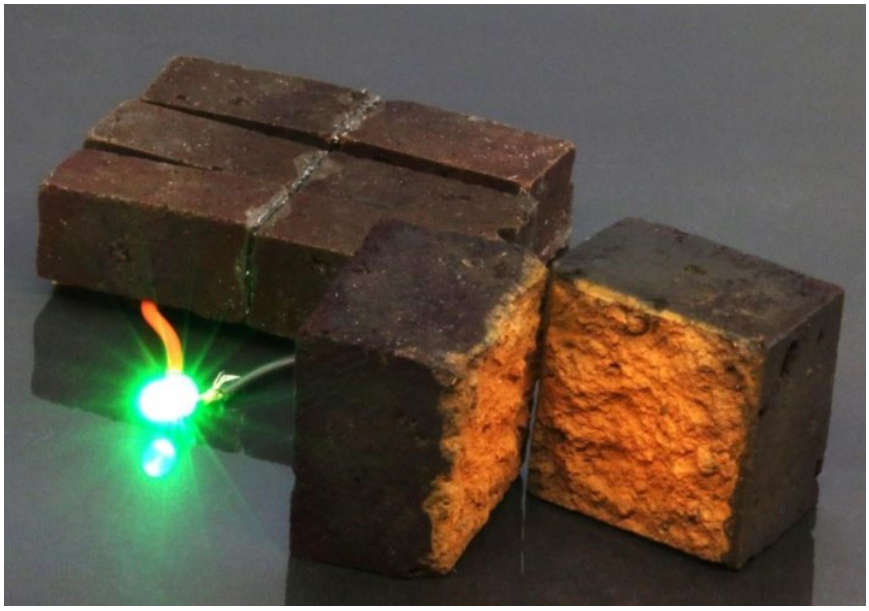

Image: Chemists at Washington University in St. Louis demonstrated how a painted brick can directly power a green LED light (Image: D’Arcy Laboratory)

Fired red bricks can be converted into energy storage units that can be charged to hold electricity, like a battery, according to new research from Washington University in St. Louis, Missouri.

Chemists there developed a coating of the conducting polymer, poly(3,4-ethylenedioxythiophene), or PEDOT, which is comprised of nanofibers that penetrate the porous brick.

This coating serves as an ion sponge that stores and conducts electricity.

Their paper, published in Nature Communications, shows a brick directly powering a green LED light.

The researchers believe that walls made of such energy-storing bricks could store a substantial amount of energy.

“PEDOT-coated bricks are ideal building blocks that can provide power to emergency lighting,” said Julio D’Arcy, assistant professor of chemistry.

"We envision that this could be a reality when you connect our bricks with solar cells — this could take 50 bricks in close proximity to the load. These 50 bricks would enable powering emergency lighting for five hours."

D'Arcy added: "Advantageously, a brick wall serving as a supercapacitor can be recharged hundreds of thousands of times within an hour. If you connect a couple of bricks, microelectronics sensors would be easily powered."

He said the method works with regular or recycled bricks. Their experiment used 65-cent bricks from the local Home Depot.

The red pigment in bricks – iron oxide, or rust – is essential for triggering the polymerisation reaction.

Neck Gaiters, Bandanas not Effective Face Coverings for Curtailing COVID-19

Sourced From: https://www.constructiondive.com

A new study looking at the effectiveness of face coverings using optical imaging technology has ramifications for the ways that construction workers protect themselves on jobsites. The study found wide discrepancies in the effectiveness of different types of masks to restrict the spread of COVID-19.

Researchers from Duke University looked at how different choices mitigated the spread of respiratory droplets during regular speech and found large differences in the way various masks performed.

The study, published by the American Association for the Advancement of Science, looked at a wide range of masks and mask materials, from surgical and N95 masks to those made of cotton, fleece and bandanas. It found that some face coverings – spandex neck gaiters and cotton bandanas – are actually no better than wearing no mask.

The research team looked at 14 commonly available masks or masks alternatives, one patch of mask material, and a professionally fit-tested N95 mask. It found that the top five types for keeping droplet spray to a minimum (under 0.2 relative droplet count) are:

- Fitted N95 mask
- Surgical mask
- Poly/cotton mask
- Polypropylene mask
- A swath of polypropylene material

Four two-layer cotton pleated masks, a one one-layer cotton pleated mask and a knitted mask were found to be relatively helpful at minimizing spray, coming in at less than 0.4 relative droplet count.

The study also highlighted the types of face coverings that are not helpful in mitigating droplet spread and brought up many considerations for workers on construction jobsites, especially those who prefer to wear lightweight masks such as neck gaiters. These were found to disperse the largest droplets into a multitude of smaller droplets.

“Considering that smaller particles are airborne longer than large droplets (larger droplets sink faster), the use of such a mask might be counterproductive,” the researchers wrote.

Furthermore, the study found that valved N95 masks, which are commonly used in construction, can decrease the protection of those surrounding the wearer.

“Such a valve allows air to move from the wearer’s mouth and nose through the mask without going through the main filter,” the study said. “While this may make exhaling easier, at the same time, it may permit viruses to get on through to the other side.”

In the construction industry, face coverings to prevent the spread of COVID-19 are recommended and even required on most jobsites and 67% of respondents to a recent Construction Dive survey said that they are an important means of protection.

While construction pros said they see the need for face coverings on jobsites, they don’t always like having to wear one. Drawbacks include that they can make the wearer feel hot and tend to fog eyeglasses and safety goggles. Other reasons mentioned were that they make it hard to breathe during strenuous activities, they can fall apart, and they irritate the skin behind the ears.

Despite the new findings from the droplet study, the researchers said that because COVID-19 is such a new disease there is still much to be learned about how it is transmitted.

“Determining mask efficacy is a complex topic that is still an active field of research, made even more complicated because the infection pathways for COVID-19 are not yet fully understood and are complicated by many factors such as the route of transmission, correct fit and usage of masks, and environmental variables,” they said.

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
- **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

- **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
- **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 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:

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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