CSC

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.

March 2020 Edition

Editor: Tracey Stawnichy

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Provincial Building Administrator & NECB Presentation Tuesday, March 10, 2020

Location: Chateau Louis Hotel & Conference Centre
11727 Kingsway NW
Time: 7:30 am – 10:00 am
To register, go to Eventbrite.ca and search CSC

Presented by Paul Chang and Nabil Habashy from the Alberta Government Ministry of Municipal Affairs, the discussion is on the Provincial Building Administrator updates followed by a presentation on the National Energy Code for Buildings. This includes new technical documents released by the province, potential amendments to the code, municipal affairs engagements with stakeholders, and building envelope requirements and permitted exemptions.

Paul has worked in the development of the 2005, 2010, and 2015 National Building and Plumbing Codes, 2014 Alberta Building Code, and the National Building Code-2019 Alberta Edition. He has 42 years of experience working in the construction field, inspections and as Technical Advisor-Building, and including the past 3 years as the Provincial Building Administrator. He has attained Safety Codes Officer certifications in the Building, Fire, Plumbing and Gas disciplines. He is a Journeyman Plumber, Gasfitter and Oil Burner Mechanic. Some committee work includes 17 years on the Standing Technical Committee for the National Building & Plumbing Codes of Canada, 14 years with the Canadian Advisory Council on Plumbing (CACP), 3 years on the CSA Steering Committee for Plumbing Standards and working in conjunction with the Building Sub-Council as Provincial Building Administrator.

Nabil is an experienced Architect & Building Safety Codes Officer with a demonstrated history of working in both private and government administration industry. His background includes energy and environmental design, Revit, AutoCAD, codes, customer service, and sustainability. Nabil graduated from Alexandria University and is a registered architect in Alberta, Dubai and Egypt.

2019 / 2020 Edmonton Chapter Executive

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Advertising Rates

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

Chapter Sponsor

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

Student Sponsor

Meeting Sponsor

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

FOR FURTHER INFORMATION

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

GOALS OF CSC

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

To this end, CSC pursues the study of systems and procedures that will improve the coordination and dissemination of information relevant to the construction process.
We seek to enhance the quality of the design and management aspects of the construction activity through programs of publication, education, and professional development, believing that by so doing, we can contribute best to the efficiency and effectiveness of the construction industry as a whole.

OBJECTIVES OF CSC

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

To publish literature pertaining to the construction industry.

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

Announcements:

This area is for announcements about you, our members. Any milestones, awards, or other announcements, please contact the Executive.

Chair's Message

Tracey Stawnichy, CSC Edmonton | Chapter Chair

Happy March! It's going to be a beautiful spring, I can feel it! Don't forget to check out all the events we have planned – go to Eventbrite and sign up! We have a breakfast meeting on the 10th, CSC Fun Night at Greta on the 26th, then Infonet in April! I'd like to remind everyone that if you change jobs or move, or change any of your contact information – please contact National and let them know, so you won't miss out on anything! Looking forward to the CSC Conference in Montreal this year? Have you registered yet?? Early bird pricing ends April 17th!

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)

Mrs. Tammy Fulks (Paydli)
Email: tpaydlt@gmail.com

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) – Starts September 2020 (10 weeks), 6:00pm – 9:00pm; Location: TBD
- Specifier – Starts September 2020 (15 weeks), 6:00pm – 9:00pm Location: TBD
- Construction Contract Administration (CCA) – Starts September 2020, (11 weeks), 6:00pm – 9:00pm, Location: TBD
- Technical Representative (TR) – Starts September 2020, 6:00 – 9:00 pm (11 weeks) Location: TBD

Upcoming Classes Online:

Principles of Construction Documentation (PCD) – Started January 6, 2020 (Code CNST002)
Technical Representative (TR) – Started January 6, 2020 (Code CNST004)

Upcoming Workshops:

Principles of Construction Documentation (PCD) 5 Day Workshop – TBD
Construction Contract Administration (CCA) 5 Day Workshop – **March 4-8, 2020**, Eaton Chelsea Toronto, 33 Gerrard Street West, Toronto, ON M5G 1Z4 / **March 18-22, 2020**, Travelodge Hotel Vancouver Airport, 3071 St. Edwards Drive, Richmond, BC V6X 3K4
Specifier (SP) 7 Day Workshop – **March 2-8, 2020**, Eaton Chelsea Toronto, 33 Gerrard Street West, Toronto, ON M5G 1Z4
Technical Representative (TR) 5 Day Workshop – **March 4-8, 2020**, Eaton Chelsea Toronto, 33 Gerrard Street West, Toronto, ON M5G 1Z4

Social Media:

Check us out:


csc Edmonton
UPCOMING EVENTS 2020
NEBC Changes
MEETING STARTS AT 7:30AM
Mar 10
CSC Fun Night
FUN STARTS AT 5:00PM
Mar 26
InfoNet
EVENT STARTS AT 2PM
Apr 22
Annual Chapter Meeting
MORE INFORMATION TO COME
May 12
Annual Golf Tournament
REGISTRATION STARTS AT 7:00AM
Jun 25
Visit our website for more info
http://edmonton.csc-dcc.ca/

InfoNet 2020

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 Get Invited?

This is a sponsor invited event. If you have yet to receive an invitation, please contact your local material representative. Alternatively you can go to www.edmonton-csc-dcc.ca to view the participating companies and reach out for an invitation. If you have any questions, feel free to contact any member on the InfoNet Committee.

Website:

www.edmonton.csc-dcc.ca

Date: April 22, 2020
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

csc EDMONTON

Warren Macdonald

Warren Macdonald's life's boundaries were redefined in April 1997 with his accident on North Queensland's (Australia) Hinchinbrook Island. Climbing to the Island's tallest peak, he became trapped beneath a one-ton boulder in a freak rock fall. Two days later he was rescued, only to undergo the amputation of both legs at mid thigh.

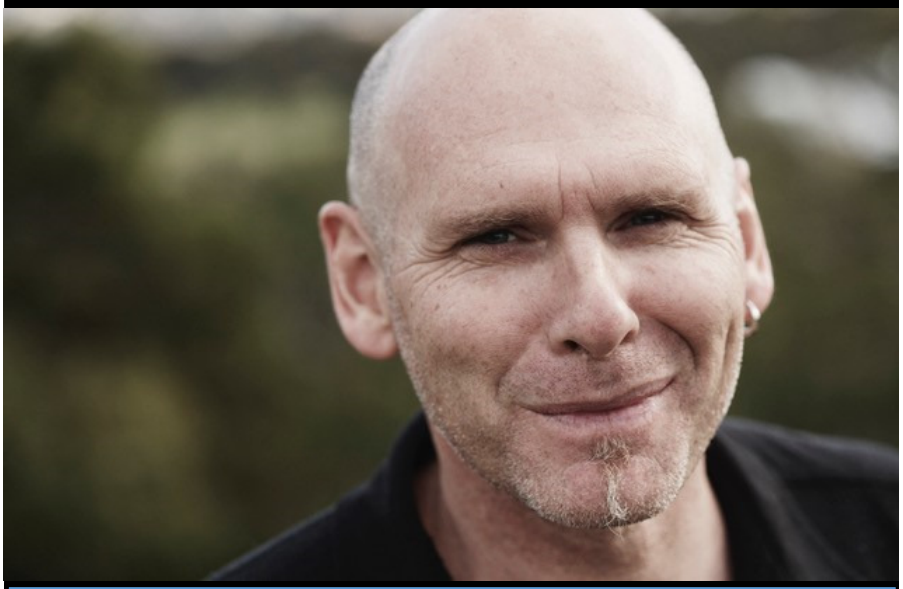
Just ten months later, he climbed Tasmania's Cradle Mountain using a modified wheelchair and the seat of his pants.

In February 2003, he became the first double above-knee amputee to reach the summit of Africa's tallest peak, Mt Kilimanjaro (19,222ft), and more recently, in a spectacular effort requiring more than 2,800 pull-ups over 4 days, created history once again in an ascent of America's tallest cliff face, El Capitan. He is also the only above knee amputee to make an ascent of Canada's landmark frozen waterfall, the 600ft "Weeping Wall" in Alberta.

Warren's first book, "A Test of Will" is an Australian bestseller and the subject of the "Trapped under a Boulder" episode of the **Discovery Channel** series "*I Shouldn't Be Alive*". His film documenting the epic four-week journey to Federation Peak, Australia most challenging mountain summit, "The Second Step", has been acclaimed worldwide, screening on **National Geographic Television** and winning eight international awards including Grand Prize at the prestigious "**Banff Mountain Film Festival**".

Warren has appeared on numerous news and current affairs programs, including "**Larry King Live**", "**The Oprah Winfrey Show**", and "**The Hour**" with **George Stroumboulopoulos**. He has written articles for "**CNN World Edition**" (WWW), "**Australian Geographic**", "Speaking of Impact" and "Professional Speaker".

He lives in Canmore, Alberta with his partner Margo Talbot.



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Articles of Interest

Design Competitions Won't Solve Your City's Problems

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

At the end of last year, New York City's sanitation department announced the winner of an 18-month competition to design a "next generation" litter basket. The winning design of the BetterBin contest is a nice-enough-looking metal-and-plastic receptacle by Group Design, intended to be lighter, more durable, and better defended against illegal dumping of household trash.

But if you walk the streets of New York City, you'll see an array of trash can designs, from stylish to utilitarian, already competently gathering the city's refuse. The real problem is not poorly designed trash cans making corners messy, but the adjacent sidewalks being blocked by piles of plastic bags awaiting curbside collection – a problem that might be better addressed by moving garbage out of pedestrian thoroughfares.

If local leaders truly want to get trash off the streets, they might give residents a better way to dispose of their household waste, including the many models made for sorting recyclables that are found on every corner in numerous European cities. They might also take a closer look at the city's trash collection system, which has long suffered from corruption and safety problems. Can New York City's litter be so different that no existing product or policy can address the mess? Does any city really need to reinvent the trash can?

New York City's American Idol for garbage is the latest in a long string of efforts by city leaders to jury, select, study, brand, pilot, and prototype shiny branded™ solutions to urban problems instead of picking a perfectly serviceable solution already in existence.

Blame the remnants of Kickstarter urbanism for sparking the latest civic craze. When the crowdfunding platform was young, it crawled with creators seeking attention for their pop-up projects, from underground parks to streetside libraries. Projects that treated urban ills as startup opportunities in need of disruption raised the most money – never mind the actual construction costs, local regulations, or existing zoning.

In their bureaucratic eagerness to present a neat fix to the public, city competitions end up ignoring what the public might actually need.

Take the competition to design a "powerful and enduring symbol" of Silicon Valley in San Jose, California. The five-acre site is part of a much larger city park in need of a makeover that would better serve the densifying downtown neighborhood. A Chicago initiative to design a more affordable version of Chicago's signature bungalow resulted in a handsome two-flat that's currently being built for under $300,000. Yet two years later, developers in the city are not building enough starter homes, of any design, to make the city financially accessible. Denver's public works department solicited designs for scooter-parking corrals in an effort to "reclaim" streetspace for people. Why is the city not giving scooter users safer places in the street to ride them?

It's true that a number of beloved American icons, including the Gateway Arch in St. Louis and Chicago's Tribune Tower, have been the result of competitions. But as the tools for producing

renderings have been democratized, and the strictures on competitions loosened, many design contests have become unwieldy free-for-alls, with the most outrageous entries generating the most publicity. Such designs have a social media allure, of course. But they also create a distraction.

Even back in the early days, competitions were considered publicity stunts – vanity projects for local leaders seeking to bring global attention to their cities. Now leaders are extending a legacy-making mentality once reserved for museums and skyscrapers to basic infrastructure. Not only does infrastructure not require a flashy game-show solution, the game-show approach might produce the wrong final product for the constituents in need.

In November, the Los Angeles mayor's office announced a competition to envision a better streetlight design for the city that adapts the traditional stanchion for more modern tasks. "We want the streetlight to operate as something of a Swiss Army knife without necessarily looking like one," reads the press release. Required elements for LA's new lamp include not one but two lighting fixtures, an LED strip, a cultural placard, and a shade sail. Suggestions for optional blades include EV charging stations, solar panels, air-quality monitors, cameras, real-time traffic sensors, and digital signage.

LA may well need some of these elements on sidewalks. But the previous mayor embarked upon the "largest LED streetlight replacement project in the world," swapping out more than 140,000 lights by the time he left office in 2013. So not only does LA not necessarily need to be relit – and, in fact, the city already has an encyclopedic roster of attractive street lamp designs to choose from – it seems like a streetlight isn't the best way to perform many of these ancillary tasks. Planting more trees near existing lights, for example, would provide many more benefits than appending shade sails.

City leaders often claim that an "open ideas" framework allows anyone to propose a previously ignored solution to an urban problem. But the truth is that these competitions are rarely breakthrough opportunities for new voices.

Submitting a thoughtful, well-researched entry to a competition requires a certain level of privilege. A practitioner must not only have enough well-paying clients to subsidize the extra hours needed to devote to developing a submission, they must also be making enough money in the first place to cover additional expenses from working overtime, like child care. On top of that, many competitions require paying a fee just to enter – with no guarantee of compensation if the winning concept is (ever) implemented.

The idea that competitions are exploitative is not new, of course, but it's one that has become more urgent over the last few years as the design industries organize for better labor conditions. Why are city leaders who are pushing to raise the minimum wage, or who require their own departments to use unionized workers, soliciting free ideas from potential design contractors and, in many cases, students, instead of paying them fairly for their work?

But the most urgent argument against competitions is that they use up time and energy that our communities can no longer spare. Last year was the second hottest on record. Human dependence on plastic is poisoning our water supply, despoiling natural resources, and clogging landfills. Our most common mode of transportation kills 40,000 people per year, and blankets cities with toxic air. A person making minimum wage can't afford to rent a two-bedroom apartment in any county in the U.S.

What the users of streetlights and trash cans, bus shelters and bike lanes, parks and public bathrooms need is not a new model bedazzled with charging ports and Wi-Fi, but something that works and can be installed citywide today – if not yesterday.

Deferring action by launching a competition not only takes up precious time, it takes the onus off city leaders to make an executive decision that should be inevitable. Remember when New York Gov. Andrew Cuomo launched the Genius Transit Challenge, soliciting ideas to win $1 million to fix the

New York City subway? In addition to sucking hours away from his staff, the competition resulted in six months of stalling when the governor might have deployed obvious, much-needed solutions.

Meanwhile, a group of New York Times journalists posed the same question – how would you fix the New York City subway? – to a handful of experts, who outlined many of the same ideas as the winning proposals. For free.

Ideas that have been proven to work elsewhere don't need to be juried by a panel of thought leaders. They don't need to be disrupted. They don't need to be prototyped. They just need to be done.

While we believe in the power of good design for cities, we also believe in the power of good enough design – installed as soon as possible, at a price municipalities can afford, that improves quality of life for the greatest number of people. We need leaders with the political will to place an order for the best product on the market, not perpetuate this fantasy of city exceptionalism.

Many urban problems require the simplest, sturdiest solution. Let's stop posing questions—and start building the answers.

Wood Spotlight: Research Begins to Show Wellness With Wood

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

DON ERHARDT – Constructed two decades ago, the still innovative Forest Sciences Centre at the University of British Columbia has long been a favourite study spot with students for its light-filled timber-built design.

Built over twenty years ago, the Forest Sciences Centre at the University of British Columbia – with its soaring, timber-framed atrium and tree-like wood columns supporting a massive skylight – is the closest thing you'll find to an indoor forest canopy. David Fell, former research leader at FPInnovations, sees this building designed by DGBK Architects as "the ultimate relaxed environment, where people come from all over the campus to study.

The popularity of the almost entirely wood space, filled with natural light and finished with Douglas-fir and bigleaf maple veneer, inspired Fell to dig a little deeper. In 2010, he launched a study to investigate the health benefits of wood in the built indoor environment. In the last few decades, studies have shown that exposure to nature can lower blood pressure, heart rate, and stress levels, while cognitive performance, concentration skills, and even creativity are seen to improve. Nonetheless, Canadians spend as little as 6% of their time outdoors.

We compensate by bringing plants and greenery into our homes and workplaces. Research reveals that the presence of nature indoors can reduce the human perception of pain, as well as thermal discomfort. For Fell, this measurable influence of natural elements like indoor plants on human well-being suggests that exposed natural wood might also provide the same benefits. “People don’t notice changes in temperature if there are plants in the room,” he says. “If we can prove this for wood in interior applications, it could have profound implications for sustainability by reducing the carbon load of the operation of a building.”

To test the effects of wood and natural materials in the built interior environment, 119 students were assigned to either wood or non-wood rooms. The researchers continuously monitored heart rate and skin conductivity, which both fluctuated in response to stressful thoughts or stimuli. The study had three distinct time periods. In the first period students were left alone in the room to measure anxiety or anticipation-type stress reactions. In the second period students completed a stress-inducing mathematical task to measure their reaction to a direct stressor. Finally, students spend a third time period in the room alone to observe their stress recovery.

PERKINS AND WILL CANADA / @ANDREW LATRIELLE – Increasingly, education, healthcare, and other public Buildings incorporate wood for its biophilic benefits, such as Samuel Brighouse Elementary by Perkins and Will located in Richmond.

The results: students who spent time in rooms featuring natural wood exhibited lower stress reactivity. During all three periods of the study, stress, as measured by sympathetic nervous system activation, was measurably lower on average in the rooms featuring wood than in the non-wood office.

These early results are promising. We’ve long used wood in the interiors of our homes for its warm and calming qualities, and for these same reasons we are increasingly seeing wood used in office, healthcare, and retail environments. “Wood is an insulator,” explains Fell. “It feels warm to the touch. This is a prized relationship.”

The precise nature of this relationship is difficult to quantify. “From a psych evolutionary perspective, there are certain things in nature that gave us an evolutionary advantage,” says Fell. “For most of our

evolution, humans have had a close relationship to trees and wood, so it's only natural that its visible presence has a positive effect on our well-being. This is not a learned reaction," says Fell, "it is an innate response. We are wired to recognize things in nature that benefit us."

Fell draws attention to the concept of "biophilia," which suggests that humans possess an innate tendency to seek connections with nature. "In the early nineties we focused on improving a building's environmental performance, but we weren't necessarily always focused on improving the health of its occupants," says Fell. "These days, the conversation has turned to the health of the occupants, and wood has a really great story to tell." And while more research is needed, science is beginning to confirm what folk wisdom has taught us – that wood, and nature, is good for our health. Something we've intuited since time immemorial.

Articles like this are featured in a newly released book, Naturally Wood, which showcases British Columbia's sustainable forest management, cutting-edge wood architecture, design and technologies.

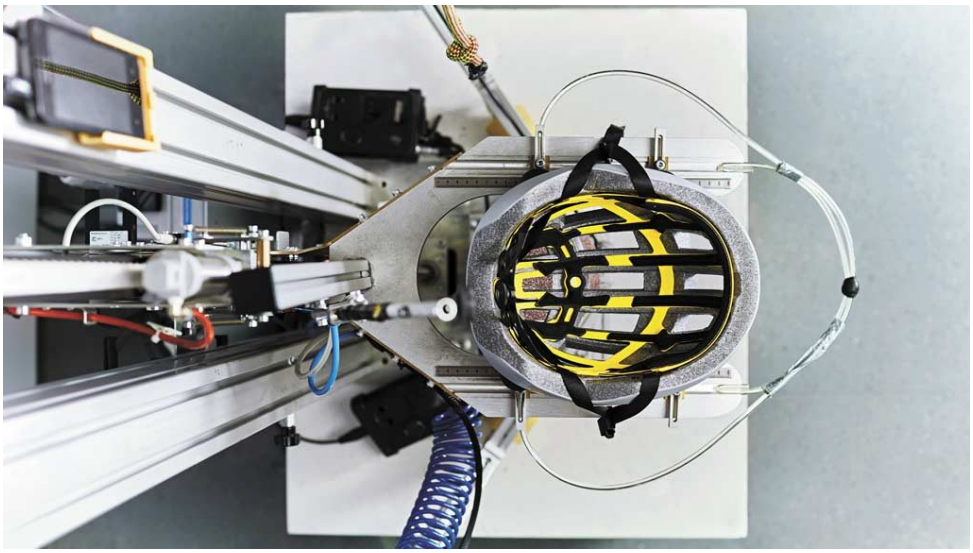
Four continuing education units have been developed based on the book. They are recognized by the Architectural Institute of British Columbia and are available at: https://www.naturallywood.com/naturally-wood-ceus.

Download the Naturally Wood e-book at: https://www.naturallywood.com/nwbc.

New Hardhat Tech Designed to Protect the Brain From All Angles

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

GUARDIO—Industrial safety firm Guardio and MIPS AB, a company that focuses on science-based product development for helmets, have partnered to produce a hardhat that takes head protection to a new level. Their design aims to reduce rotational forces to the head and injuries to the brain.



Two Swedish companies have put their heads together and come up with the world's first brain-protection heavy duty hardhat.

Industrial safety firm Guardio and MIPS AB, a company that focuses on science-based product development for helmets, have partnered to produce a hardhat that takes head protection to a new level.

The Armet helmet, as it's known, is in the process of being certified for the Canadian market and distributors are being lined up. It is based on Multi-directional Impact Protection System, or MIPS technology, which has been developed by leading brain surgeons and scientists and is designed to reduce rotational forces to the head and injuries to the brain that can be caused by angled impacts to the skull.

Research has shown that rotational motion can increase the risk for minor and severe brain injuries. MIPS uses a slip-plane system that literally moves inside the helmet, mimicking the brain's own protection system. The system can reduce the harmful rotational motion transferred to the brain by an impact.

“By developing the Guardio ARMET helmet in collaboration with the MIPS team we ensured that we could offer the market a unique product that is based on scientific research that is proven to reduce the risk of brain injuries and, by that, hopefully elevate the safety at construction sites,” says Guardio CEO Nawar Toma.

Guardio was looking to raise the level of safety equipment for customers and MIPS had the technology.

GUARDIO – The ergonomics of the new helmet were also taken into consideration, say designers.

“We were already developing noise-canceling headphones for industrial use and wanted to develop a safety helmet that could be used together with our headphones,” says Toma. “When we decided to investigate the possibilities to develop a new safety helmet ,we realized that there was no one on the market offering an MIPS-enabled helmet for the heavy-duty industry. Despite that, several third-party test reports showed that MIPS-enabled helmets in the fields of sports most often was evaluated as best-in-test.”

Guardio contacted MIPS to see if their technology could be used in a heavy duty helmets to reduce the risk of brain injuries. By that time, MIPS had already conducted several tests that showed it does make a difference.

MIPS technology has been around since the mid-90s when Swedish neurosurgeon Hans von Holst began to study helmet construction. He partnered with Peter Halldin, researcher at the Royal Institute of Technology, and they formed MIPS AB with three specialists in the biomechanical field from the Royal Institute of Technology in Stockholm. The company is focused on improving the safety of helmets.

MIPS CEO Max Strandwitz says the company looks at relevant injury criteria to better understand the types of accidents that occur in certain types of activities before developing solutions in specific areas. Based on the data and information, the company can then model the impact with an MIPS low-friction layer.

Strandwitz says accident statistics have been a very important factor in helping the company better understand situations at a construction site.

“One of the most important findings in the statistics is that out of head-related injuries at a construction site, 30 to 40% relate to traumatic brain injuries,” he notes. “The inclusion of MIPS is an important factor of decreasing the risk for brain trauma.”

According to the Centers for Disease Control and Prevention, the construction industry has the greatest number of both fatal and non-fatal traumatic brain injuries, and from 2003 to 2010, 25% of all construction fatalities in U.S. workplaces were caused by a traumatic brain injury.

An MIPS-equipped construction helmet looks almost identical to a non-MIPS helmet except for on the inside where there is a thin yellow liner beneath the pads. From the outside, the only indicator that the helmet is any different to one without MIPS is that some brands have a small yellow MIPS logo on them.

The secret behind MIPS-patented technology comes from the human brain. The brain is surrounded

by a low-friction cushion of cerebrospinal fluid. MIPS mimics the brain's own way of protecting itself by giving the MIPS-equipped helmet its own low-friction layer and slip-plane system between the helmet and the head. The layer enables a relative movement of 10 to 15mm between the head and helmet in any direction at the brief moment of angled impact.

Toma says the most unique feature of the helmet is the fact that it aims to reduce rotational motion to the brain from angled impacts, but that is not all.

"We have focused a lot on the ergonomics of the helmet to ensure that the helmet is comfortable to use even during long working days. The product is well ventilated, light-weighted and the design is slim. In addition to that, we have chosen to use ABS for the outer shell and an EPP layer on the inside to ensure durability, comfort and a premium-quality product also when it comes to the materials used."

The hardhats range in size from 53 to 61cm in length, weigh about 390 grams and come in a variety of colours.

MIPS AB previously launched bicycle and motorcycle helmets in 2007 and has sold more than nine million systems to more than 78 helmet brands.

For more information on the helmets, visit http://www.guardiosafety.com/.

Coronavirus Impacts Could Have Ripple Effect on U.S. Construction Industry

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

The coronavirus outbreak in China could add another layer of unpredictability to the many uncertainties facing commercial building in the U.S. From labor shortages and tariffs to an upcoming presidential election, the industry entered 2020 facing many unknowns, and experts say the fallout from the COVID-19 virus is one more factor poised to affect construction firms.

The outbreak that has sickened nearly 75,000 and killed more than 2,000, mainly in China, could have ramifications even for U.S. builders with no presence in the region. Government containment efforts and quarantines have slowed or shut down factories in dozens of cities and provinces, leading to forecasts of a sharp falloff in production of everything from cars to smartphones, according to the New York Times.

Richard Branch, chief economist for Dodge Data & Analytics, said that the American construction industry will not be immune to the coronavirus' impact. For commercial builders that rely on Chinese-made goods or materials, this could mean higher material costs and potentially slower project completions.

By Branch's estimate, building product imports from China account for nearly 30% of all U.S. building product imports, making China the largest single supplier to the U.S.

"With China's manufacturing output declining as factories are temporarily sidelined," he said, "it's likely that U.S. building product supply chains will be affected, with costs potentially moving higher."

U.S. builders look to China for everything from steel and other building materials to cabinets and fixtures, according to Daniel Pomfrett, vice president of forecasting and analytics at construction cost consultant Cummings. The virus has led to a slowdown of supply to the market that is expected to cause price increases across many of these commodities.

"Items such as copper, aluminum and casework look to be some of the key products affected and already we are seeing price increases," he told Construction Dive.

Steel is a bit trickier to forecast, he said, because its price was expected to rise this year after prices bottomed out due to oversupplies from both China and U.S. makers. A reduction in Chinese supply due to the outbreak could help to even out supply and demand, he said, driving prices up faster than was expected. On the other hand, reduced Chinese demand caused by the outbreak may counteract most of the upward push.

Either way, U.S. producers of structural steel will help keep price fluctuations to a minimum, he said.

Short-Term Uncertainty

The downturn has affected U.S.-based companies like Trimble, Apple, General Motors, Ford and Nissan. Leaders of global construction firms AECOM and Fluor have both noted little to no impact as of yet in recent earnings calls.

"We'll continue to evaluate that guidance as we start to see things hopefully return to normal," AECOM CEO Michael S. Burke told investors. "At this point we don't expect it to have any impact on our business."

Peggy Marker, president of Ft. Lauderdale-based Marker Construction Group, said she has been keeping an eye on the situation, most notably on how the slowdown in manufacturing could affect imports of structural steel from China, which her company uses on some of its healthcare, hospitality, multifamily and other commercial projects.

While she realizes it may cause a short-term bump in steel prices, the worst part is not knowing how long the crisis will continue, she said.

“Nobody has any kind of handle on how long this is going to be going on or exactly how it’s going to impact everything,” she said. “From what I understand they think the virus is starting to plateau, so hopefully things will return to normal shortly.”

As the spread of the virus begins to slow, some Chinese workers are starting to return to their jobs. But even as factories reopen, they are unlikely to be fully staffed, according to the American Chamber of Commerce in Shanghai.

When production does pick up again, it will take time to ramp up while facilities work through a backlog of orders and transportation networks come back online after regional quarantines lift, according to Supply Chain Dive.

All of these factors will come into play in determining whether construction materials prices will rise in the U.S.

“The exact extent to which they increase will be determined by how quickly the virus can be contained and how much product can be substituted from other countries,” Branch told Construction Dive.

Business as Usual

Because the virus is just one more potential risk among several others already on contractors' radar, firms like Marker's can fall back on time-tested strategies for protecting themselves.

She said her company’s first line of defense against volatile costs is to have a variety of sources and suppliers on hand for when prices start to get out of control. She said when Chinese granite was in short supply a few years ago, for example, her company worked to find more local vendors.

In addition, most of her suppliers' bids are locked in for between 30 and 90 days, which provides a buffer from unexpected price hikes.

“Aside from that,” she’ll keep on with business as usual, she said, “trying to negotiate good deals with subs and suppliers."

Atomik is Vodka Brewed From Grain Grown in the Chernobyl Exclusion Zone

Sourced From: https://www.dezeen.com/2019

The first bottle of Atomik has passed radioactive safety tests.

Scientists have created Atomik, a brand of artisan vodka made from rye grown on land in Ukraine abandoned since the Chernobyl nuclear disaster, to help the people living there.

The first ever bottle of Atomik vodka has been triple distilled then diluted to 40% using uncontaminated groundwater drawn from an aquifer in the town of Chernobyl, 10 kilometres south of the defunct Chernobyl Nuclear Power Plant.

By making the vodka, the researchers aim to show that alcohol made from crops grown near the site is safe to consume and provide a means of income for local producers.

After rigorous testing, no radiative isotopes such as plutonium, americium, cesium or strontium show up in the finished product.

Only a trace of carbon-14 can be found in the first bottle of Atomik, a level that is found naturally in alcohol.

The Chernobyl Spirit Company was set up by a team of scientists from Ukraine and Portsmouth University in the UK, who worked with people living in the zone to monitor and test the farming process and the results of the vodka-making.

They wrote a report to demonstrate that alcohol made from crops grown in the Chernobyl Exclusion Zone (CEZ) and the Zone of Obligatory Resettlement is safe, with the single bottle of Atomik as the physical proof.

"From a radiological point of view, it is safe to drink," said Jim Smith, who co-authored the report and helped found the Chernobyl Spirit Company.

"I think this is the most important bottle of spirits in the world," he added. "It could help the economic recovery of communities living in and around the abandoned areas."

The scientists hope that once the vodka is accepted as safe it can go into full production, with 75% of the profits from sales going to local communities and wildlife conservation efforts within the exclusion zone.

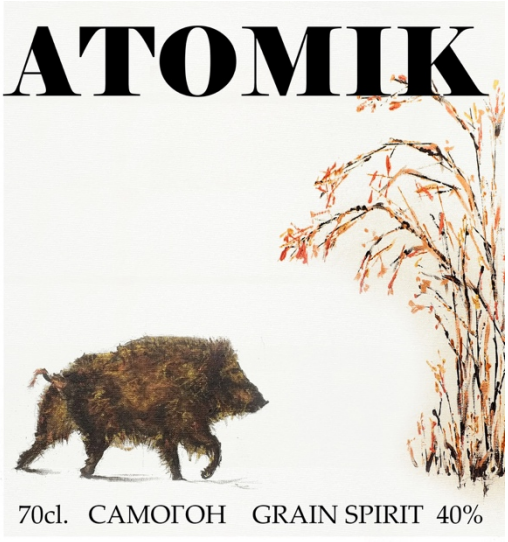
Atomik's glass bottle is decorated with a picture of a wild boar, one of the species that has benefited from the reduction in human activity after the disaster.

"The wild boar represents the resilience of nature, but also the long and difficult road to recovery of the Chernobyl-affected people in the face of too many simplistic and often wrong assumptions about their environment," said the makers of Atomik.

Over 6,000 kilometres of land in Ukraine and Belarus has been un-farmable since the No. Four nuclear reactor at the Chernobyl power plant exploded in 1986, causing an open-core reactor fire and launching radioactive contamination into the air.

Although officially abandoned, many people still live in the area and are suffering from high levels of unemployment.

Contamination from nuclear disasters can introduce artificial radionuclides – atoms with excess nuclear energy – into the food chain.



The label for the vodka brand features a wild boar

While these can be found naturally in most foods, in high concentrations they could be dangerous, and even if levels are safe people are reluctant to buy anything that might be seen as contaminated.

The scientists' report proves that crops grown in the exclusion zones are either already safe or at levels of radioactivity that can be removed by Atomik's triple-distilling process.

With their report and the vodka production they hope to prove that radiation levels in the inhabited parts of the zones are now at a normal level and help reduce the stigma for people living and working there.

A 2006 report from the World Health Organisation concluded that poverty and mental health issues resulting from the legacy of the disaster pose a far greater threat to local populations than any residual radiation.

Some of the people displaced by the disaster ended up living in the UK, where Spheron Architects built a memorial chapel for victims of Chernobyl.

ASSOCIATION LINKS

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

www.omniclass.ca
www.omniclass.org

- **Uniformat**
  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 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/
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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
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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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