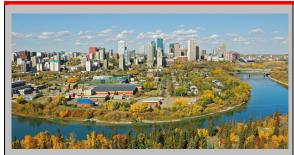




Construction Specifications Canada is an organization representing diverse interests in the construction industry and related professions. It is dedicated to improving the quality and flow of information between these interests, whether in the form of specifications, contract administration or marketing.

April 2020 Edition Editor: Tracey Stawnichy



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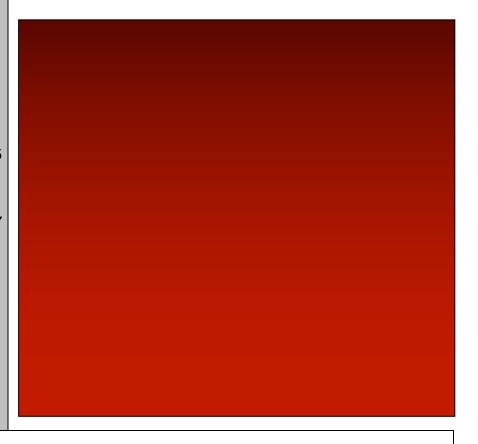
REMINDER:

All Scheduled CSC Events are Cancelled / Postponed Until Further Notice

For updates during this time, please check the CSC Website regularly.

We will continue the monthly Specifier.

Stay Safe and Stay Home!



2019 / 2020 Edmonton Chapter Executive			
Director	Kevin Osborne	780 717 1007	
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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.

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New Chapter Sponsor Bundles:

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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.

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:

Congratulations to Claude Giguere, Susan Morris, and Don Shortreed for receiving CSC Life Memberships! Some good news to offset all the bad news we've been subject to these past months!

Chair's Message



Fracey Stawnichy, CSC Edmonton | Chapter Chair

Well, it's April, and I can bet nobody thought things would be like they are right now, and on a global scale. We on the Executive Committee hope that our members and their families are taking all the necessary precautions to keep safe during this time. As you all know, CSC events have been cancelled across the country, in keeping with the protocols set forth by the government. We don't know when things will get back to some semblance of normality; the best we can do is our part to stay safe and above all, practice social distancing. We will keep you posted with updates as we receive them. Stay safe, everyone!

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)

Ms. Catherine Boyd Administrator ACI Architects Inc. 17225 – 102 Avenue NW Edmonton, AB T5S 1J8

Tel: 780-486-6400 Fax: 780-486-6401

Email: cboyd@aci-arch.com Website: www.aci-arch.com

New Member Sponsor: Mr. Kevin Osborne

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

None this month.

Previous Members Re-Joining / Re-Activated

None this month.

CSC Education:



Mike Ewaskiw, CTR

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 – TBD Specifier (SP) 7 Day Workshop – TBD Technical Representative (TR) 5 Day Workshop – TBD

Social Media:

Check us out:





Articles of Interest

The Dotted Line: When Contractors Can Walk Off the Job

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



When general contractors or subcontractors sign on to construction projects, they usually start off believing everything will run smoothly. But, during the course of the work, issues sometimes arise that force all parties to go running back to their contracts in order to evaluate their options.

One of those options for construction companies is to simply stop work, but contractors need to take care when making such a big decision.

"Stopping work and ultimately terminating the contract is one of the most radical things you can do," said Joseph McManus Jr., attorney and shareholder at law firm Carlton Fields.

Luckily, most of the circumstances under which contractors are clearly entitled to stop work are included in the most popular standard forms of contracts.

Nonpayment

The most common reason that contractors find it necessary to stop work, McManus said, is that they haven't been paid for approved invoices.

In that scenario, he said, contractors have the right to pull off the job as long as their contracts allow for it, providing they've complied with all of the notice requirements.

For example, in the American Institute of Architects' A201- 2017, "General Conditions of the Contract for Construction," which is incorporated by reference in most AIA owner-contractor agreements, a contractor has the right to stop work under two conditions.

One circumstance is if the architect does not certify the contractor's payment application within seven days of receipt, barring some fault of the contractor. The other is if the owner does not pay the approved pay application within seven days of the date established in the contract.

If one of these events occurs, then the contractor can stop work after providing the owner an additional seven days' notice.

The AIA's A401-2017, "Standard Form of Agreement Between Contractor and Subcontractor" has a similar provision. The subcontractor can stop work after providing a seven-day notice if it has not received payment from the general contractor within seven days of the payment date set out in the subcontract.

In all of these cases, McManus said, the contractor or subcontractor that hasn't been paid is entitled to a schedule extension for the period of time work was stopped plus reimbursement for demobilization and remobilization costs.

It's important, however, for contractors and subcontractors to read their contracts before they sign to make sure there are some protections for nonpayment. Not everyone uses AIA or ConsensusDocs forms, and contracts drawn up in-house by an owner or general contractor might not include favorable terms or recourse for late payments.

"Due diligence," said attorney Karl Frederic with Windels Marx Lane and Mittendorf LLP, "is the No. 1 line of defense."

Short of walking off the job, which is certainly a disruptive action, there is also the mechanic's lien option, Frederic said, or even just the threat of one in order to induce the owner or general contractor to pay. A mechanic's lien creates an encumbrance on the project property, and the dollar amount that the lien represents typically must be paid or otherwise resolved before the owner can sell or refinance the property.

"The mechanic's lien is a powerful tool that can be used against the owner in any number of ways," he said. For instance, if the project is financed, a mechanic's lien could put the owner in default of its mortgage on the property.

A subcontractor lien carries the same consequences for the owner and can also get wheels moving when it comes to past due payments to specialty contractors.

Really, though, Frederic said, good business practices on the part of contractors can reduce the chance that payment issues will cause problems on the job.

Contractors, he said, should check out their customers' credit and payment history with other construction companies. They should also insist on using AIA contracts because judges and arbitrators are most familiar with them if a dispute makes its way to court. Finally, he said, don't let the customer get too far behind in payment before addressing the deficiency.

The owner has not given evidence of abulity to finance the project

This might surprise some general contractors, but, according to McManus, their contracts could allow them to stop work if the owner does not give them evidence that it has made financial arrangements or has the wherewithal to pay bills associated with the project.

Contractors, however, can only request that proof under certain circumstances, at least for those using AIA 201 or another form that includes that right.

If using AIA 201, the contractor can ask for proof that the owner is able to pay its bills on that job after work has started if the owner does not make timely payments, if the contractor has a "reasonable concern" that the owner won't be able to meet its financial obligations on the project, or if the owner makes changes to the work that materially increases the contract amount. If the owner fails to provide that information, then the contractor can stop work.

If such contractor requests are ignored prior to the job starting, the contractor doesn't have to start the project at all until the owner hands over the necessary information. In both scenarios, contractors, again, are typically entitled to most expenses incurred due to the stoppage.

Cardinal Change

A cardinal change, McManus said, is a type of change so extreme that when added to the scope of work, it alters the very nature of the contract. "It really isn't the same contract anymore," he said.

For example, if a contractor is hired to only demolish a building for \$50,000 and then is handed a change order for \$500,000 to build a new one, that would be a cardinal change.

Most changes, however, McManus said, are difficult to prove as a cardinal change versus a change order, with which contractors typically are contractually bound to perform.

Even a cardinal change, though, doesn't affect the contractor's obligation to complete the original scope of work outlined in the contract.

If the contractor declares that a change is cardinal, changing the essence of the original contract, and the owner — or the general contractor in the case of a subcontractor — disagrees, then the matter could end up in court, which does not mean a slam dunk for the contractor. Cardinal changes, McManus said, are decided on a case-by-case basis and are very difficult to prove.

Surprise Finds

Discovery of unexpected hazardous conditions, underground storage tanks, culturally significant artifacts or human remains — these are all examples of when contractors can legally stop work in the affected areas or as directed by authorities, McManus said.

However, according to some contracts like the AlA's A201, contractors can't walk off the project if they can find a way to work safely around these hazards.

This is another situation when contractors are usually eligible for reimbursement for the expenses that come with halting and restarting work, as well as an appropriate extension of the schedule for the days lost to remediation or removal of items from the site.

Then there are the disputes that aren't so clear cut.

In these circumstances – i.e. arguments over which company is responsible for a construction error, a constant struggle to get change orders approved, an overall contentious relationship – there is typically no clear path to being able to rightfully walk off the job.

They can be frustrating, said Jim Gallagher, a principal with Resolution Management Consultants, but, still both parties must adhere to the contract and the rules it sets forth for stopping work and possibly terminating the contract.

And, he said, one can't underestimate the ability of an honest, straightforward negotiation to head off a court battle or, at the very least, a contractor walking off the job.

"You have to step back and take a look at what you may be responsible for and how you may have contributed [to the issue]," he said, "because, more often than not, it's very rare that things are black and white. You have to evaluate the shades of gray."

There are usually three sides to every story, Gallagher said, and contractors, as well as owners, sometimes overlook that. What both parties need to keep in mind is how their case will look to the eventual decider, be it in a courtroom, arbitration or mediation.

"If you've already gone through that [process] and the situation has no other recourse, then you need to follow what the contract requires," he said.

Coronavirus Could Have Multiple Impacts on Construction

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

Canada's construction sector should brace itself for significant supply-chain interruptions caused by the coronavirus outbreak, experts assembled by the Canadian Construction Association (CCA) recently warned.



Not only will supplies be disrupted, the trio of experts in the Feb. 18 informational webinar explained, but stakeholders should also prepare themselves for other ramifications such as higher costs, the collapse of strategic partnerships, logistics breakdowns and possible legal squabbles as parties debate whether contracts may provide "force majeure" relief.

"No-one is buying anything or producing anything in China right now," said Peter Kapler, senior vice-president and national

director of performance security with Aon.

As for construction supply-chain problems, he said, "It's not a matter of if but when."

Kapler laid out the rapid spread of the coronavirus from its initial detection by the Chinese Center for Disease Control on Dec. 21, 2019 to Jan. 23, when the city of Wuhan was guarantined.

On Jan. 30 the World Health Organization declared a "global health emergency" and by Feb. 17, the global case count was 73,435 cases.

Wuhan is known for producing metal products, mechanical equipment and solar panels as well as electrical and electronics manufacturing. Cheri Hanes, a construction risk engineer with AXA XL, said there were 164 manufacturing facilities in Wuhan creating products often used by the global construction industry, including 13 plants that directly manufacture construction materials.

Overall, Canada imports \$48.5 billion in goods from China annually, with over \$500 million in each of the electrical and electronics, plastics, iron and steel, glass and prefab building sectors.

In short, said Hanes, constructors around the world are realizing right now how closely they are tied to China for supplies.

"Problems are going to reverberate quickly through supply chains," she said.

Hanes urged Canadian firms to immediately conduct a supply chain audit. Rather than narrowly focusing on the city of Wuhan, she said, their sights should be trained on all of China and beyond, including any third parties their suppliers and partners deal with. The audit should look to identify possible shortages of raw materials in addition to finished products and prepare for costs to soar, with the timetable for distress most likely extending well after the outbreak becomes contained.

"It's not only that materials will be unavailable, it's that materials will be unaffordable," said Hanes, adding the effects could be "catastrophic" to a balance sheet.

"There may be some serious after-effects."

Canadians should start to work with all parties to identify vulnerabilities end to end in the supply chain, Hanes said. Owners, contractors, subs and suppliers should all be talking transparently and making accommodations in these extraordinary circumstances.

"A big room approach is needed," she said.

Supply chain Plan B's should be developed and risk registers recalibrated, she said. Can alternate capacity be built up? Constructors should recognize there will be a "next time" and given that the world is more interconnected than ever before, they should plan to build a more resilient supply chain that can sustain the impacts of more frequent disruptions.

"All of this is deep work but it's worth it," said Hanes.

Risk engineering may be the opposite of value engineering, "but that money may be very well spent," she added.

"A learning organization doesn't just snap back, it learns and grows."

The third contributor to the panel was Andrea Lee, partner with Glaholt Bowles, who explained that many contracts include force majeure clauses that release parties from performance of contractual obligations when unexpected events occur that will make performance more onerous than expected.

Typical criteria include an event that is beyond the control of a claiming party, when the event prevents or delays contract performance, when the event was not due to negligence or fault of the claiming party, and when the claiming party has exercised reasonable diligence to overcome the specified force majeure event.

Examples are "acts of God" such as landslides or earthquakes, and acts of terrorism.

CCDC contracts include such unforeseen events and call for the contract performance time to be extended for a "reasonable" period – typically for the duration of the event – to be determined though consultations.

Lee presented case law offering helpful interpretation of the doctrine but noted no Canadian legal judgment has ever had to consider force majeure in the case of a serious outbreak or epidemic. Courts considering the matter in future would probably look at the Atlantic Paper Stock decision (1976), which established criteria such as a determination whether the change is so radical that it strikes at the root of the contract, and whether the parties, through the exercise of reasonable skill, can find work-arounds.

"Keeping track of all the evidence that might have to be used down the road, I think that is important" in showing reasonable efforts were made to find alternative solutions, Lee said.

In the end, Lee agreed with both Kapler and Hanes that parties should attempt to maintain relationships during a crisis and find practical solutions. "Parties should think about how to work together," said Lee. "Legal principles meet a real-world approach."

Kapler had the last word: "It is a big-room issue, and a lot of communication is required from all parties on a going-forward basis. There is a big role for the CCA to play."

Inside NASA's Plan for Private Space Homes

Sourced from: https://www.architecturaldigest.com / All renderings courtesy of Philippe Starck

Last summer marked the 50th anniversary of Apollo 11, the NASA mission that first placed our species on the moon. And while that event will remain the apogee of human achievement, we are on the verge of yet another accomplishment in the cosmos. NASA recently unveiled the design for its first-ever space modules. To complete this difficult feat, the government agency joined forces with Texas-based start-up Axiom Space in creating at least one structure that would have the ability to house private citizens visiting our solar system by 2024.



A look inside the Philippe Starck-designed space homes, which include padded walls.

To design the interiors of each unit, NASA and Axiom turned to French-born designer Philippe Starck. The 71-year-old virtuoso has made a career of designing an eclectic range of products (including watches and yachts). But it's his most recent design, which will house private citizens in outer space, that will allow us to witness the furthest reaches of his imagination. According to Starck's website, the design will be "a home base for professional astronauts and private explorers." While the prospect of ordinary people rocketing into space is exciting, the project has facets to it. The modules will provide housing to national astronauts from countries that are not currently part of the International Space Station (ISS) partnership (or those that are but do not currently receive as many flight opportunities). All Axiom flights to outer space will be commanded by professionally trained astronauts. What's more, any government or person that pays the cost of the flight (which has been reported to be at least \$35,000) and passes a basic physical examination may board a flight. Prior to the launch, however, private citizens will be trained by Axiom professionals at its facilities in Houston. The trips will last roughly 10 days, with eight of them spent aboard the ISS.

View from one of the living quarters, which features LED lighting and touch screens



"Our goal was not to create a copy of life on earth but to create the best environment for human beings in this infinite territory," says Starck. "My vision is to create a comfortable egg, friendly, where walls are so soft and in harmony with the movements of the human body in zero gravity." To this end, each livable unit will be outfitted with padded walls embedded with touch screens and LED lights, as well as handrails for navigating oneself in zero gravity. The current plan calls for the space homes to be attached to the ISS, with the goal of eventually having a

cluster of homes branching off and turning into self-sustaining structures.

The space has handlebars for ease and safety of movement

Perhaps the most appealing part of living within one of these space modules is the views afforded from within. Each module will be fitted with large windows, allowing for unparalleled views of Earth and beyond. Some of the convenience of conventional life will be on board the space module, including high-speed Wi-Fi.

Wi-Fi aside, there will be nothing easy in creating a module in outer space. "A space station is ruled by a fundamental law: zero gravity. And it changes



everything," explains Starck. "Life on Earth is held down by gravity, but life in space is a multidirectional freedom: There is no horizontal, no vertical, even no diagonal. And functions are new, sometimes unknown. At the same time, it is a difficult place, with difficult rules, but it also gives an infinity of solutions."

There is a section of the spacecraft that allows for nearly uninhibited views of outer space



If we ever wondered whether Starck was up for the task of creating private modules in outer space, the answer was always there, hidden in plain sight: The description of his website reads, "Enter Philippe Starck's universe." Construction of the first modules will begin this year.



A rendering shows how Axiom's space station would appear when it is no longer attached to the ISS.

How Will Home Automation Affect Our Future?

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

Once restricted to luxury or super-tech buildings, home automation is proving to be an increasingly fundamental and affordable addition to architectural projects, whether to new buildings or renovations. While understanding how they operate can be extremely complex, the primary purpose of technology is to make life simpler, safer, and easier. By definition, home automation seeks to be globally intelligent, functioning as a system that facilitates processes without unnecessarily complicating the user's life. The idea is to connect devices, which in turn connect and talk through a centralized control unit, accessible by computers, tablets, and mobile phones. These include lights, appliances, electrical outlets, and heating and cooling systems, but also alarms, doors, windows, smoke detectors, surveillance cameras, and many other sensors and devices.

For example, home automation users can turn the lights on or off at specific times each day, adjust the heater or air conditioner to turn on a few minutes before they arrive home, or turn on all the lights in their home when the security system alarm is triggered. In addition to these immediate effects,

monitoring applications can also provide accurate home information by generating detailed reports on equipment that could be working better or spending less. As systems such as Google Home, Alexa, and Amazon Echo become more and more common and artificial intelligence becomes more and more sophisticated, the integration of diverse applications in residential spaces should increasingly enter our daily lives through the Internet of Things (commonly referred to as IoT). That is, in addition to smartphones and personal computers, appliances and sensors are able to identify patterns, process information, and perform tasks both through commands and automatically. From a clock or a refrigerator to cars, machines, and urban infrastructure, many of the mechanical products we interact with can communicate and automate processes. Although it sounds like a science fiction script, these are technologies that are not so far from us. Listed below are some relevant questions on the topic:

Increased Security

This is one of the main reasons why people opt for home automation systems. Information gathered from connected devices and motion sensors allows the system to understand when users are indoors and out, to lock doors and gates, and to leave some devices on standby. But artificial intelligence can also be used to automate threat detection and perhaps more proactively alert us if something looks wrong, such as heat sensors and video cameras setting off alarms and calling firefighters in the event of a short circuit. Through facial recognition algorithms on social media, the system itself can tell if someone outside your circle of acquaintances is trying to access your space and send a message to your mobile phone asking whether you want the doors to stay locked or not. This type of technology can improve the efficiency of security systems and reduce false alarms.

Improve the Lives of People with Reduced Mobility

Automation can be useful for people with disabilities and for the elderly. People with Parkinson's disease or other motor diseases can trigger switches without touching them, and motion sensors can trigger safety lights automatically. Motion sensors can also signal a toilet crash and trigger rescue services. Even blood pressure sensors and blood sugar levels can be incorporated into these systems, providing peace of mind to close relatives.

Resource Saving

Although the system installation may be a high initial investment, it can be cost-saving in the long run because of the savings it can provide. Technologies such as thermostats and smart lighting connect to centralized control that can act on its own or be programmed to control energy consumption and reduce waste. Just as lighting and home security can be controlled by a single device, even the water bill can be impacted. For example, intelligent irrigation systems work similarly to stop flow and save money, some even reacting to weather conditions to apply exactly the correct amount of water to the soil.

Make Everyday Life and Buildings Smarter

The ability to automate repetitive housekeeping can free time for more important things. For example, an internet-connected refrigerator can check for missing items and make purchases online. With smart devices, many home appliances can be remotely programmed and will work automatically or by touch. You would be able to trigger almost everything by smartphone.

It is important to mention that these systems must be highly protected, as a single attempt to break into this centralized system can lead to the invasion of privacy and the loss of valuable confidential information. Still, most people who have experienced life in an automated space will likely be uncomfortable returning to traditional systems. It is critical to experience the benefits of home automation in order to understand its potential and to know which elements will best improve your daily life.

In Praise of Precedent: How do Architects Use History for Inspiration?

Sourced From: https://archpaper.com

In the wake of the looming executive order decreeing neoclassical as the federal government's "preferred and default style," how can architects consider the past while still creating buildings and spaces that are of their time?

Most architects seek the intriguing and inspiring when it comes to a new project, and for many, this means considering the project's site, context, and history. And while the recent news about a potential executive order mandating neoclassical as the de-facto style for new federal buildings has architects up in arms, designers can look to the past in countless ways to create spaces that are meaningful reflections of their time and place, but free from the confines of a dictated historical style.

For some, an interest in the past began even before practicing architecture. Tal Schori and Rustam Mehta, cofounders of the Brooklyn-based GRT Architects, proudly state that they "studied history before design," and that this has instilled in them a love and respect for history that "yields an understanding that the past is layered and compatible with new work, executed confidently in its own voice."

Their approach looks to historical references, in particular architectural detailing, craftsmanship, and ornament, to create "something unapologetically new." At a lobby renovation of the Fashion Tower, an Art Deco office building in New York's Garment District and the new firm's first project, Schori and Mehta lined the walls of the entry corridor with vertical panels of angled marble. The pleated pattern of the marble recalls the verticality of Art Deco motifs as well as the folding of textiles as an ode to the building's origins.

GRT's self-proclaimed "aesthetic and historical agenda" was further explored in a line of concrete tiles for Kaza Concrete. The triangular tiles, available in three different sizes, were cast with asymmetrical grooves in deep relief and designed so that they can be arranged in a variety of ways: Installation in a regular pattern emulates a flattened fluted column; alternating directions can create a herringbone pattern, and a nonrepeating arrangement leads to an abstract pattern. The interplay of symmetry, tone, and texture results in a tile collection that is firmly in the land of modernity while looking over its shoulder to the past.

For architect Elizabeth Roberts of the eponymous Brooklyn-based Elizabeth Roberts Architecture, an interest in history led her to complete a master's in historic preservation before starting her own firm that focuses on renovations and additions to existing buildings that, in her words, "breathe new life into historic buildings." Yet despite her "love for historic buildings," she explained, she also believes in "authenticity" – that additions should appear "different" from the original structure while still "respecting their original massing, details, and materials." Delicately glazed facades, modern furniture, and an eclectic sense of minimalism pervade her work and visually declare old versus new.

But even where her work distinguishes itself from the existing fabric, she still begins every project by "understanding a building's story" through research on its history, context, and neighborhood, she noted. Craftsmanship plays an important role as well, and she "enjoys seeing artisans continue their craft in our projects," regularly hiring master plasterers and woodworkers who understand historic styles to create new, elaborate elements such as handrails.

While some designers are inspired by materials, detailing, and construction techniques of the past, others look to the unique cultural heritage of the region to tell the story of a place through its built environment. In Hawai'i, for example, oral history and genealogy chants were the main means of passing down history for centuries, and many of these oral histories have been collected at the Bernice Pauahi Bishop Museum in Honolulu – a source architect Ma Ry Kim, a principal and design director at the Honolulu-based firm G70, frequently uses as part of her initial research for the project.

During the recent renovation of The Westin Maui Resort & Spa, Ka'anapali, the museum's archives revealed that prior to the construction of the 1971 hotel, the site had historically been covered with a native grass "that held morning dew, giving water and life to land," said Kim. Inspired by this untouched landscape, she employed vertical elements throughout the project that hark back to the site's tall blades of grass, from the wood battens on the exterior of the building to the carefully selected artwork found throughout the lobby and even in the woven textiles selected for guest's rooms.

For Kim, architecture is an important way to tell Hawai'i's cultural story. She noted that many sites "tread on indigenous lands that were once protected and considered sacred places," and she thus tries to "seek balance between the modern world and the historical markings of a place" in her designs. At another hotel renovation project, the Prince Waikiki Hotel, she learned of a long-forgotten ancestral stream that ran below the hotel's foundations. The stream's boundaries were graphically resurrected through contrasting flooring materials in the lobby, and the stream inspired the central suspended artwork created by local residents and employees that consists of nearly 1,000 copper hinana, a local fish – an ode to the area's native landscape.

But even projects in the heart of major metropolises like New York City can nod to their existing context, like Foster + Partners' new tower in Midtown Manhattan at 100 East 53rd Street, which pays homage to the modernist landmarks that surround it: the iconic Seagram Building and equally storied Lever House. Peter Han, partner at Foster + Partners, detailed how the firm "focused on the relationship between 100 East 53rd Street and the Seagram Building, aiming to create an appropriate counterpoint to the classic office tower." The building's crisply white, undulating skin contrasts with the Seagram Building's dark bronze facade, while the massing of a "9-story bustle," as Han described it, sitting at the base of the tower, "echoes the volumes of its neighbor," Lever House. Indeed, while styles may come and go, the past – and its use as a source for inspiration – will always exist, ad infinitum.

ASSOCIATION LINKS

- Alberta Construction Safety Association (ACSA) www.acsa-safety.org
- BuildingSMART Alliance (North American Chapter of BuildingSMART): www.buildingsmartalliance.com
- BuildingSMART International (formerly IAI) www.buildingsmart.com
- Biomimicry Guild www.biomimicryguild.com
- Canadian Green Building Council (CaGBC) www.cagbc.org
- CCDC Documents
 www.ccdc.org/home.html
- Construction Specifications Institute (CSI) www.csinet.org
- International Construction Information Society (ICIS) www.icis.org
- OmniClass www.omniclass.ca www.omniclass.org
- Uniformat www.csinet.org/uniformat
- Institute for BIM in Canada (IBM) www.ibc-bim.ca

- Architecture 2030 www.architecture2030.org
- Building Information Modeling (BIM) Forum www.insightinfo.com/bimforum
- Biomimicry Institute www.biomimicryinstitute.org
- Canada BIM Council www.canbim.com
- Canadian Green Building Council (CaGBC) Alberta Chapter: www.cagbc/chapters/alberta
- Construction Specifications Canada (CSC) www.csc-dcc.ca
- buildingSMART Data Dictionary bsdd.buildingsmart.org
- MasterFormat

(https://secure.spex.ca/siteadmin/freedocuments/images/1.pdf)

- buildingSMART Canada www.buildingsmartcanada.ca
- Ace BIM www.acebim.ca

ASSOCIATION LIAISONS

Alberta Association of Architects (AAA)

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

Alberta Painting Contractors Association (APCA) www.apca.ca

Alberta 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

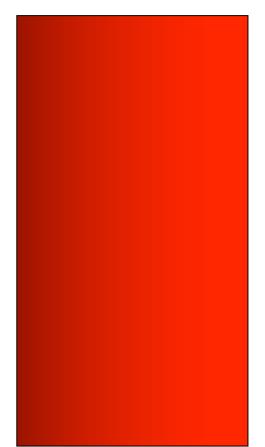
www.edmca/.com contact@edmca.com

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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