# building SMART Canada NEWSLETTER





Message from bSC BIM + GIS Report Sovereign Data Infrastructure bSC National Summit RECAP Learn about openBIM Valuing BIM Data Beyond BIM bSC Members





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#### **THANK YOU MEMBERS**



#### **Innovator**

















National Défense Defence nationale









Organization























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## LETTER FROM THE PRESIDENT

Join us in advancing open standards. Engage with buildingSMART Canada, contribute to the conversation, and help shape the future of our digital built environment.



As President of buildingSMART Canada, I believe the future of our built environment depends on openness, collaboration, and data-driven decision-making. openBIM and ISO 19650 are key to realizing this vision.

openBIM ensures interoperability across platforms, enabling seamless collaboration and reducing inefficiencies. ISO 19650 provides a global framework for managing information throughout the asset lifecycle, bringing structure and consistency to digital workflows.

Together, they lay the foundation for digital twins—dynamic, data-rich models that optimize performance, sustainability, and resilience in real time.

To build a smarter, more connected Canada, we must adopt these standards not as options, but as essentials.

#### **John Hale**

### A NOTE FROM THE CEO

## The built environment is no longer simply physical infrastructure; it's a living dataset.

The convergence of BIM and GIS is no longer a theoretical integration; it is a strategic necessity. Together, these technologies enable a more comprehensive understanding of our built and natural environments. Our work is focused on supporting interoperability, advancing openBIM and empowering stakeholders across the asset lifecycle to work smarter and more efficiently through shared data and processes.

In today's complex world—marked by shifting trade dynamics, climate risks, and evolving digital threats the need for secure, sovereign, and high-quality information is more urgent than ever.

We must ask: who owns this data, who benefits from it, and how do we use it to build a more resilient and equitable future?



#### **Claudia Cozzitorto**



## WHAT'S HAPPENING IN CANADA



## New Report on BIM-GIS Integration



We are excited to share a major step forward in digital transformation for Canada's built environment. "Integrating BIM & GIS to Support Regulatory Applications" a new report produced by Carleton Immersive Media Studio in partnership with buildingSMART Canada—offers a comprehensive look at how integrating Building Information Modeling (BIM) and Geographic Information Systems (GIS) can streamline planning, permitting, and regulatory approvals.

#### Key highlights from the report:

- Why BIM-GIS Matters: Integration enables regulatory agencies to visualize proposed developments in their real-world context, automating compliance checks, improving transparency, and accelerating approvals.
- Practical Applications: The report explores how integrated data can support zoning automation, construction tracking, and lifecycle asset management.
- Standards & Interoperability: A deep dive into existing BIM and GIS standards (like IFC and CityGML), and how alignment—through ISO TR 23262 and Application Domain Extensions (ADEs)—can solve real-world challenges.
- Challenges Addressed: The report identifies critical hurdles such as inconsistent georeferencing, conceptual mismatches, and lack of standardized information requirements.
- Call to Action: It makes a clear case for developing a national common data platform to support municipalities and regulators across Canada.

This publication is an essential read for urban planners, policy-makers, regulators, and digital delivery professionals seeking to drive smarter, faster, and more informed decision-making.

#### Read the full report

Produced by: Carleton Immersive Media Studio + buildingSMART Canada

Released: April 2025

Let's build smarter—together.

#### Sovereign Data Infrastructure

#### Why It Matters for Canada

As global tensions and digital vulnerabilities rise, the concept of Sovereign Data Infrastructure (SDI) is gaining urgency in Canada. In her recent article, Anusuya Datta explains that SDI refers to the ability of a nation to govern, store, and control its data independently, without relying on foreign entities or being subject to foreign laws. For Canada, this is not only a question of national security but also one of economic competitiveness, innovation, and digital equity.

Sovereign control over data is vital for securing critical infrastructure, enabling responsible Al development, and ensuring that sensitive information—including that of Indigenous communities—remains protected under Canadian law. Data emphasizes that Canada must view data as a strategic asset, much like energy or natural resources, and develop the infrastructure and governance to manage it accordingly.

The article highlights that achieving SDI requires strong federal leadership, collaborative frameworks with provinces and Indigenous governments, and partnerships with the private sector and academia. It's not just about building data centers—it's about creating a trusted, interoperable environment where Canadian values, privacy standards, and innovation priorities are embedded by design.

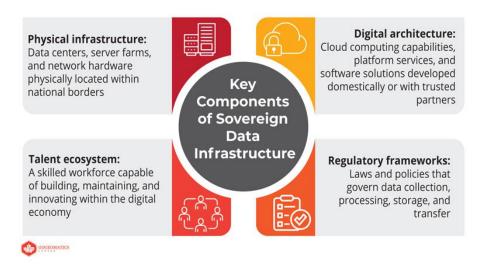
International examples, such as Europe's Gaia-X initiative, show that federated, sovereign data systems are both possible and necessary. Canada has the expertise and digital foundation to develop its own version, but the time to act is now.

#### **Why Now Moment for Canada**



#### What is Sovereign Data Infrastructure?

SDI ensures that data generated within Canada's borders is stored, governed, and controlled under Canadian jurisdiction, avoiding dependence on foreign systems that may fall under external laws or threats. It treats data as a strategic asset—crucial to national security, economic development, digital sovereignty, and resilience.



#### Why SDI is critical for Canada:

- National security & resilience: Keeps infrastructure and sensitive data out of foreign reach.
- Economic & innovation advantage: Enables domestic AI, cloud, geospatial, and open-data efforts.
- Policy sovereignty: Supports Indigenous data governance and ensures more equitable outcomes.
- Digital sovereignty: Aligns with global efforts (like Europe's Gaia-X) to retain control over national data systems

#### What's required: A whole-of-government approach

- · Federal leadership is paramount—setting the vision, standards, and funding frameworks.
- Collaboration across federal, provincial, and Indigenous governments ensures infrastructure is interoperable and inclusive.
- Private and academic engagement accelerates innovation through R&D and pilot projects.

#### What Canada Must Do Next



To read the full article:

Anusuya Datta, "Sovereign Data Infrastructure: What It Is and Why It's Critical for Canada," GoGeomatics, March 20, 2025.

Read it here

### THANK YOU TO OUR SUMMIT SPONSORS











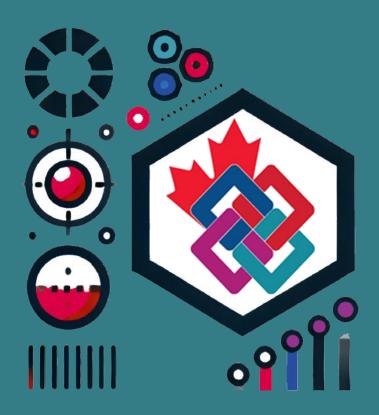








## NATIONAL SUMMIT 2025 RECAP





## EMPOWERING THE DIGITAL WORKFORCE

#### REFLECTIONS ON TRAINING

The 2025 buildingSMART Canada National Summit made one thing clear: meaningful digital transformation in the AECO industry starts with training. Held on May 12th in Ottawa, a full day of hands-on workshops offered professionals an opportunity to deepen their knowledge of openBIM, GIS integration, ISO 19650, and practical workflows that underpin digital project delivery. The turnout and engagement at each session were a strong signal of the industry's appetite for real skills development.

The morning began with the BIM & GIS: Smarter Data, Smarter Decisions workshop, where attendees explored the convergence of BIM and GIS. With clear explanations of technical differences and case-based applications, participants left with a better understanding of how geospatial intelligence can enhance asset planning and management.

In the early afternoon, SolidCAD and EllisDon delivered a joint session covering the buildingSMART Professional Certification and ISO 19650. The presentation demystified the value of certification and standards, while demonstrating tools like Plannerly that bring ISO workflows to life. It was an important reminder that certification isn't just a credential—it's a commitment to quality and consistency in project delivery.

The final workshop offered a deep dive into BIM-GIS Integration using BonsaiBIM and QGIS, blending model creation, geospatial data preparation, and digital elevation techniques. Attendees walked away with tangible skills and a new appreciation for open-source platforms in advancing spatial coordination.

Across all sessions, the message was clear: technology alone won't transform the industry—trained professionals will. By investing in education, standards, and practical skill-building, buildingSMART Canada is supporting a digital workforce ready to meet the challenges of tomorrow.

Training isn't a side activity; it's a strategic imperative. And at this year's Summit, we took a big step forward together.



#### BIMXCEL & building SMART



#### BIM + GIS SMARTER DATA, SMARTER DECISIONS



Steven Spry



#### **bSC CERTIFICATION & ISO 19650 COMPLIANCE**





Adam Wilson Steven Mahaney





#### **BIM-GIS INTEGRATION WORKFLOW WITH OPEN-SOURCE TOOLS**





Nicolas Arellano

Ken Percy





#### **CONNECTING THE DOTS**

#### REFLECTIONS ON THE BUILDINGSMART CANADA NETWORKING PARTY

Capping off an intensive day of training and site tours, the 2025 buildingSMART Canada Networking Party offered a perfect balance of connection, conversation, and celebration. Held on the evening of May 13th at the Canada Science & Technology Museum, the event brought together a vibrant mix of industry leaders, emerging professionals, innovators, and partners from across the country.

The venue itself—surrounded by cutting-edge exhibits showcasing Canada's technological evolution—offered a symbolic backdrop for discussions about the future of the built environment. From AI in construction to openBIM collaboration, every corner buzzed with shared insights and new ideas.

More than a social gathering, the event was a vital part of the Summit experience. It reminded attendees that while technology drives change, it's people—and the connections between them—that sustain it. Many meaningful exchanges took place between organizations that might otherwise operate in silos, and the energy in the room reflected a collective commitment to moving the industry forward.

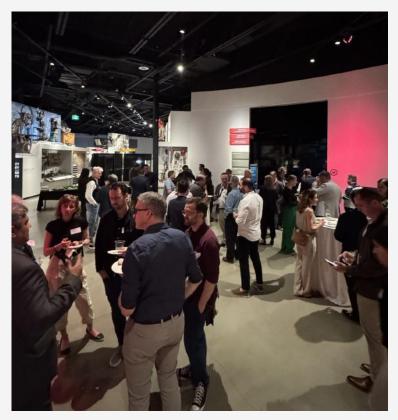
As digital transformation accelerates, collaboration is more critical than ever. The networking party provided a rare, relaxed environment to build trust, spark partnerships, and inspire shared action. In many ways, the most important outcomes of the Summit may have started right there—with a conversation over a drink, a handshake by an exhibit, or an idea sparked in passing.

This event wasn't just about winding down, it was about leveling up, together.











### A RARE GLIMPSE BEHIND THE WALLS

### REFLECTIONS ON THE CENTRE BLOCK REHABILITATION TOUR

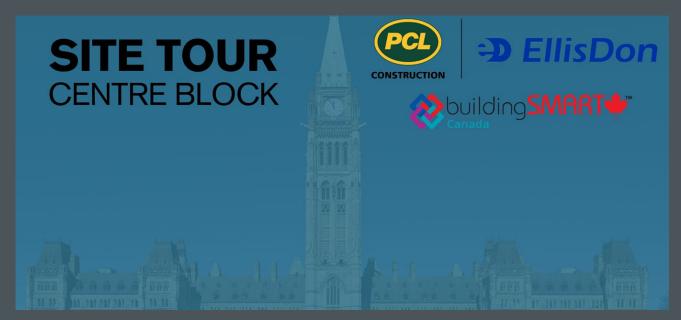
One of the most anticipated highlights of the 2025 buildingSMART Canada National Summit was the exclusive behind-the-scenes tour of the Centre Block Rehabilitation project—one of the largest and most significant heritage infrastructure projects in Canadian history. Organized in partnership with PCL and EllisDon, this rare site visit offered attendees an unparalleled opportunity to witness digital construction technologies in action at a national landmark.

Split into morning and afternoon sessions on May 13th, the experience began with a thorough orientation and a presentation from the Virtual Design and Construction (VDC) team. Attendees gained valuable insights into how the project team is using cutting-edge digital tools to manage complex workflows, ensure precision, and preserve the heritage integrity of the Centre Block.

The on-site walkthrough covered multiple levels of the building, including the House of Commons, Senate, and Hall of Honour. With PPE suits on and expert guides leading the way, participants saw firsthand how openBIM workflows, digital twins, and real-time data integration are reshaping project delivery on this iconic site.

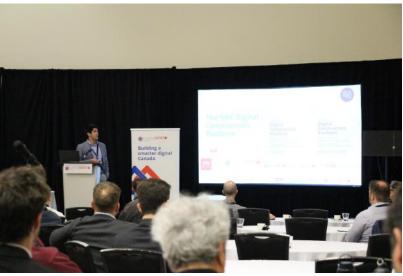
More than just a tour, this was a living case study and powerful demonstration of how theory becomes practice. From heritage scans to construction sequencing, the visit underscored the vital role of technology in balancing modernization with conservation.

This unique access underscored an important lesson: to truly understand the value of digital transformation, we must see it at work. The Centre Block tour not only showcased best practices but also reminded us that collaboration, precision, and innovation are the foundation of building smarter, together.



















## buildingSMART Canada National Summit REFLECTIONS ON THE PROGRAM

The 2025 buildingSMART Canada National Summit delivered a powerful lineup that brought clarity, depth, and direction to some of the most pressing issues in digital transformation for the AECO industry. Hosted as part of the Geolgnite Conference, the Summit offered a full day of forward-thinking sessions that reinforced Canada's growing leadership in openBIM, data standards, and technology integration.

From the opening keynote to the final panel, the program emphasized both vision and action. The day began with a spotlight on Digital Twins, setting the tone for a conversation that extended beyond design into lifecycle optimization. Participants explored how openBIM principles and global frameworks are reshaping asset management and long-term building operations.

Critical topics followed—including digital trust and security, with a compelling session on digital signatures in BIM, and Canada's national data strategy, showcased through the NRC's Common Data Framework. Presenters tackled issues of standardization, interoperability, and how Canada can align with international best practices to drive innovation locally.

Another key highlight was the discussion on "How to Become a Knowledgeable Owner", featuring insights from National Defence and Construction Canada. The session candidly explored the real-world challenges of implementing ISO 19650, offering a roadmap for public sector leadership in digital transformation.

Afternoon sessions tackled municipal planning, the future of spatial data governance, and a timely question: Does Canada need a BIM mandate? This dynamic debate brought together diverse perspectives to explore what a nationally coordinated approach could look like—balancing compliance, innovation, and market readiness.

To cap it all off, buildingSMART Canada announced the launch of a Digital Twin Domain, a strategic initiative aimed at guiding standardization and scaling digital twin adoption across the country.

In short, the 2025 National Summit was more than a knowledge-sharing event, it was a strategic moment for Canada's digital future. With topics that spanned policy, technology, and practice, it successfully brought together voices from across the industry to define not just what's next, but what's necessary.



#### **KEYNOTE Bridging Reality and Digital**

John Hale President buildingSMART Canada





#### **Securing BIM Data: Digital Signatures for Trust & Integrity**

**Patrick Drolet** Notarius





Farzad Jalaei Research Officer- Digital Construction Practices Lead National Research Council Canada



**David Minicola** Project Manager Council Canada





National Research Conseil national de recherches Canada



#### **Developing Information Requirements for National Defence**

Ozge Kuden BIM & Lifecycle Management Defence Construction Canada





#### Panel: Future Trends & Opportunities with Spatial Data





Steve Slusarenko

Subsurface Utility Map Data Exchange



Dr. Jessica West Space Security Project Ploughshares



Business Development EarthDaily Analytics



**David Hunt** EVP, Global Head of Sales



Joe Philbrook VP, Customer Success | Customer Delivery & Operations

#### **Accelerating permitting** & housing supply with Archistar



#### Digital Twins in Canada: Defining, Scaling, and Standardizing for the Future



Nicolas Arellano Architect, PhD Candidate Research team lead Carleton Immersive Media Studio



Kirk Stalkie Digital Services



Chief Technology Officer Turner Fleischer



École de technologie supérieure



Digital Advisory Lead ARUP



Senior Director, Digital Project Delivery -DEllisDon

**Does Canada Need a BIM** Mandate? A Debate



ARUP





























## PROFESSIONAL CERTIFICATION

The rapid global adoption of Building Information Modeling (BIM) presents obstacles related to terminology, competency, and consistency. To address these challenges, buildingSMART Canada champions buildingSMART International (bSI) openBIM® standards and provides the bSI Professional Certification program as a benchmark for BIM proficiency. This program benefits professionals, employers, and client organizations within the built asset industry by fostering transparency and maintaining consistency.

The Professional Certification Program supports the standardization of openBIM® training, advocates for international best practices, and raises awareness about buildingSMART and its innovative solutions.

The Foundation level addresses the needs of individuals operating at a basic level. The training helps building owners, designers, consultants, builders and project managers understand the opportunities collaboration within a virtual, openBIM environment offers.



Learn more about professional certifications

#### **BENEFITS FOR LEARNERS:**

- Global Recognition: Attain internationally recognized certification in openBIM principles.
- Quality Assurance: Showcase your competence and expertise in the built asset industry.
- Up-to-Date Knowledge: Access standardized training aligned with the latest industry developments and best practices.
- Structured Evaluation: Undergo a rigorous testing and qualification process to validate your skills.
- Flexible Options: Choose from a wide array of training concepts and specialized areas offered by our extensive network of training partners.
- Online Certification: Optional registration of your certificate in an online database for verification.
- Career Advancement: Enhance your professional profile and open doors to new opportunities in the global industry.

#### **CERTIFIED TRAINING PROVIDERS**





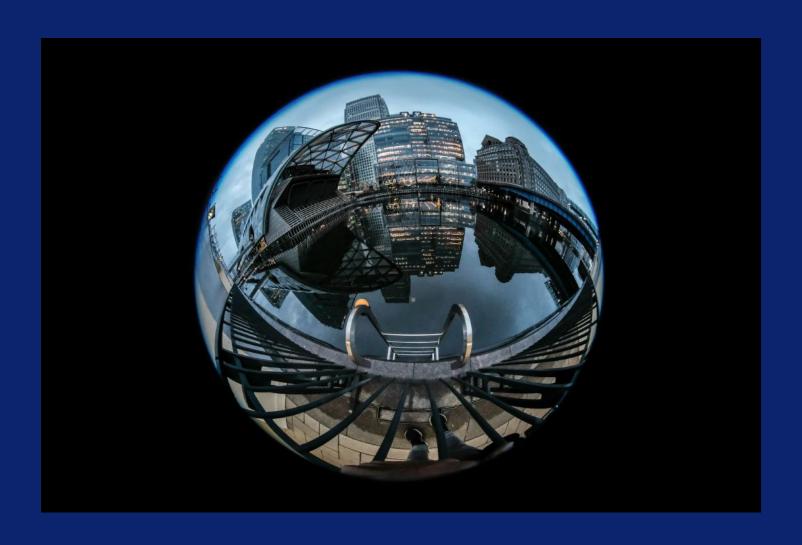




## AROUND THE WORLD AND BACK



AS A CHAPTER OF AN INTERNATIONAL COMMUNITY, OUR MEMBERS ARE CONNECTED TOO



### Learn about openBIM

#### WHAT IS IT AND HOW TO USE IT

#### What is openBIM?

openBIM® extends the benefits of BIM (Building Information Modeling) by improving the accessibility, usability, management and sustainability of digital data in the built asset industry.







#### openBIM standards:









openBIM services:





#### How to use openBIM



#### **Success stories**





<u>Learn about openBIM</u>

## INTERNATIONAL COUNCIL OVERVIEW

The buildingSMART International Council serves as the company's Annual General Meeting, bringing together representatives from Chapters, members of the Board, the Nominations Committee and the bSI Management Office.

The meeting agenda included:

- Updates from the bSI Management Office
- · Governance and financial reports
- Voting procedures on the 2024 Annual Report
- · Board nominations and appointments
- Membership of the Nominations Committee



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#### Resolutions Passed

- 2024 Annual Report: Approved
- Board Changes:
  - Ian Howell and Birgitta Schock stepped down from the Board
  - Alfred Waschl, Eric Bugeja, and Lai Wei have been appointed as new Board Members
  - Christina Hvid has been re-elected to the Board
  - Status: Approved
- Chair Appointment: Alfred Waschl appointed as Chairman – Approved
- Vice Chair Appointment: Eduard Dischke appointed as Vice Chair – Approved
- Treasurer Appointment: David Whittleton Approved
- Nominations Committee: No resolution was passed on the composition of the Nominations Committee

READ THE 2024 ANNUAL REPORT.

#### buildingSMART International Summit – Berlin 2025

September 22 - September 24



Learn more

#### Valuing BIM Data

#### **Accounting for Digital Assets**

In the article "Valuing BIM Data: Accounting for Digital Assets," Claire Whittaker and Léon van Berlo explore the complexities of assigning financial value to Building Information Modeling (BIM) data within the construction industry. While BIM data is increasingly recognized for enhancing operational efficiency and reducing costs in facility management, its classification as a financial asset remains ambiguous.

The authors discuss the potential for BIM data to be considered an intangible asset under accounting standards like the International Financial Reporting Standard (IFRS) IAS 38. For BIM data to qualify, it must be separable from the physical asset, developed at a measurable cost, and contribute to business processes over multiple years. However, determining this value is challenging, especially when BIM development costs are intertwined with overall design and engineering expenses.

To address this, the industry is experimenting with benchmarks based on actual datasets, considering factors such as the level of detail in geometry, the number of objects per square meter, the use of type objects and classification, and the number and quality of properties per object. This approach combines technical metrics with expert judgment to estimate values for specific use cases like asset management.

The article concludes that valuing BIM data transcends accounting—it is a strategic business consideration. Regardless of its recognition on the balance sheet, the true value of BIM lies in its ability to improve decision-making and reduce long-term costs. As the construction industry evolves, digital assets like BIM deserve clearer recognition in both operational workflows and financial terms.



Read the full article here

#### **Beyond BIM**

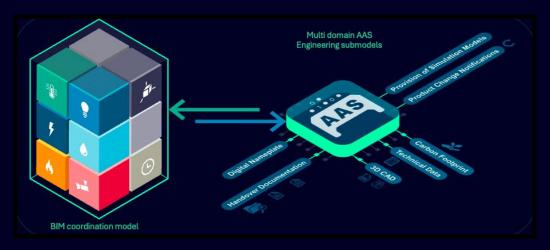
### How IFC and AAS Unlock Sustainable and Intelligent Building Operations

In the article "Beyond BIM: How IFC and AAS Unlock Sustainable and Intelligent Building Operations," Christian Frey discusses the limitations of Building Information Modeling (BIM) in achieving truly smart, sustainable, and interoperable buildings. While BIM provides a robust digital representation of a building's physical and functional characteristics, its effectiveness is enhanced through the adoption of open standards that enable seamless data exchange and holistic lifecycle management.

The article explores the integration of Industry Foundation Classes (IFC), developed by buildingSMART International, and the Asset Administration Shell (AAS) framework from the Industrial Digital Twin Association. This combination aims to deliver intelligent building operations by promoting interoperability and efficient asset management. openBIM, an approach that encompasses a suite of standards and services, ensures that all stakeholders can access and utilize data effectively, regardless of the software tools they use.

By linking BIM-defined asset locations with live operational data through AAS, buildings can achieve dynamic tracking and real-time updates. This integration supports enhanced interoperability, lifecycle management, and sustainability. For instance, in a smart building environment, an asset's BIM-defined location can be linked to live operational data using the AAS, allowing for dynamic tracking and efficient resource utilization.

The synergy between BIM and AAS offers a comprehensive approach to building management, bridging the gap between digital design and physical operation. This integration not only streamlines processes but also contributes significantly to the sustainability and efficiency of modern buildings. The article concludes that for autonomous buildings to become widespread, investment in these technologies and a commitment to open standards are essential.



Read the full article here





## THE BSC COMMUNITY

**BUILDING A SMARTER CANADA WITH YOU** 

#### DON'T FORGET TO ENGAGE WITH YOUR LOCAL AFFILIATE

buildingSMART Canada's affiliate program connects local and regional BIM communities from across the country. United by their goal to build and strengthen the Canadian community for a better built environment, the affiliates help support innovative project delivery practices based on openBIM standards.



- BIM Québec
- Calgary BIM Community (cBIMc)
- BIMbc (Vancouver/Victoria)
- Edmonton BIM Community
- Digital Built National Capitol Region (Ottawa)
- Toronto BIM Community
- Saskatchewan BIM Community
- Winnipeg BIM Community

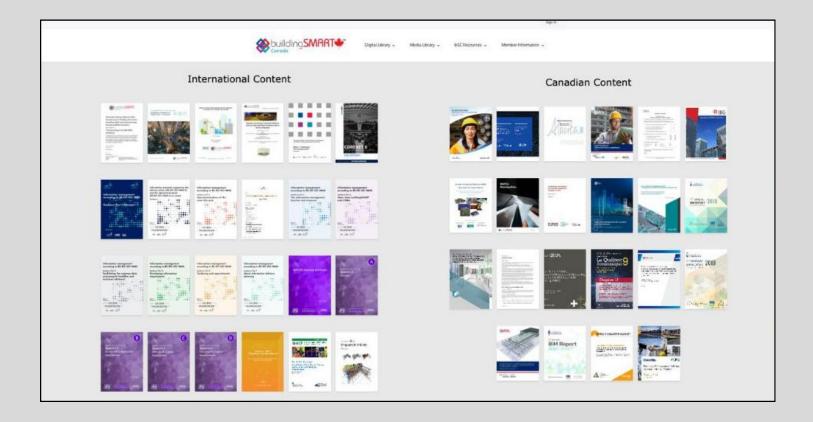


## MEMBERS GET ACCESS TO THE BSC DIGITAL LIBRARY

The bSC Digital Library is an exclusive platform with a vast array of digital resources. Members will have access to the latest publications, essential documents and certifications, insightful videos, newsletters, and engaging podcasts tailored specifically for our community.

By becoming a member, you gain access to a wealth of information right at your fingertips. Our Digital Library is designed to enhance your knowledge, support your professional development, and keep you informed about the latest industry trends and standards.

Join bSC today, log in to the Digital Library, and explore, discover, and share the comprehensive resources available to you. Embrace this opportunity to stay ahead in the everevolving world of building information modeling (BIM) and digital construction.



## MEMBERSHIP PROFILES



buildingSMART Canada supports and serves various industry sectors by providing access to publicly available national and international information on openBIM and BIM Standards through its website.



#### **INDIVIDUAL**

An Individual Member is given the opportunity to participate with industry peers in a collaborative environment supporting information sharing, as well as BIM social and technical events. *Click to learn more.* 



#### **ORGANIZATION**

Organizations who want access to curated and exclusive industry publications, resource, and participate in a community that supports interoperability and best practices for the Digitalization of the Built Asset Environment in Canada. *Click to learn more*.



An Organization to join as an Industry Council Member to engage with peer members, supported within a project delivery framework, to conceptualize, plan, and implement industry sector domain building and infrastructure BIM process and standards. Connect with clients, customers, and users within the industry domains. Build awareness and positive brand recognition though community engagement and marketing opportunities. *Click to learn more*.



#### **STRATEGIC**

A Strategic Organization of buildingSMART Canada wishes to be recognized as a Patron of BIM and an Advocate for the Digitalization of the Built Asset Environment. Connect with clients, customers, and users within the industry domains. Build awareness and positive brand recognition though advanced community engagement and marketing opportunities. Click to learn more.

#### **THANK YOU MEMBERS**



#### **Innovator**

















National Défense Defence nationale









Organization























bSI Members Supporting Canada







#### COLLABORATE. INNOVATE. TRANSFORM.

#### **JOIN TODAY**

#### **DON'T MISS OUT!**

Be Part of the Movement Defining the Future of Our Built World



**VISIT US ONLINE** 

www.buildingsmartcanada.ca