

## LONDON CHAPTER MONTHLY MEETING

CSC London Saturday Social with a Presentation on Event Planning 101

Presented by:

Jeff Halashewski, RSW , London Chapter Director & Program Events Director

Location: Palasud South, 141 Pine Valley Blvd, London

Date: March 25, 2023

Time: 1:00 pm to 5:00 pm

Register at Karelo:

<https://www.karelo.com/register.php?BID=531&BT=10&Ev=21085>



## FEBRUARY 2023 MEETING

The CSC London chapter held its February Monthly Chapter Meeting on February 16th 2023 at the Kinsmen Recreation Centre in London, Ontario. The dinner was accompanied by a presentation on the topic of “Designing a Cost Effective Rainscreen Façade with HPL”. The presentation highlighted the use of High Pressure Laminates in the Rainscreen / Façade world, an overview of rainscreen benefits, material cost factors and inspiring HPL strategies.

Special thanks to our speakers Collette Hart and Nicolas Vanegas from Allied Technical Sales and to all that attended and participated.

Please join us for our Saturday Social on March 25th at Palasud South for an afternoon of networking, games, food and beverages. The topic for the social is Event Planning, so come out with topics and maybe names of potential presenters. Every registration comes with a free registration for a non CSC Member so sign up early!



## SPECIFIER'S CORNER: IFC – What does it really mean??



**Paul D. Gerber,**  
London Chapter |  
Officer, Specifications  
Writer

This always seems to be a point of discussion on the various projects that I work on. Based on my experience and language in the various CCDC contracts, the parties involved in a construction contract don't always have a strong understanding of this term and what it should mean.

IFC should mean Issued for Consolidation, not Issued for Construction. There is no requirement within CCDC contracts for the Owner or Consultant to provide an Issued for Construction set of documents.

The Contact is established by the Bid Documents that are issued, whether that is to numerous bidders in a CCDC 2 design-bid-build project, to the Construction Manager (CM) in a CCDC 5A or 5B construction management project or to the Design-Builder in a CCDC 14 design-build project.

With the growing use of a construction management project delivery method and more commonly CCDC 5B contracts, there is a differentiation between Contract Documents and Construction Documents that may be contributing to the confusion. Following best practices outlined in documents such as CCDC 10 – A Guide to Construction Contract Delivery Methods, the Construction Manager should be contracted with early in the design phase. This means that when a Request for Proposals (RFP) for construction management services is issued, the documents available may only be early design development drawings and draft specifications, in addition to the experience and submission requirements outlined in the RFP document itself. I usually recommend 90% complete Divisions 00 and 01 Specifications Sections so the Construction Manager is aware of the required administrative requirements when preparing their RFP response and costs for carrying out the work. The RFP and the Drawings and Specification issued with it become the basis for executing the CCDC 5B contract and the RFP documents

## Why Become a Member?

### ACCESS TO CERTIFICATION AND LICENSING PROGRAMS:

CSC supports member certification and licensing initiatives, both required and optional. This offers you an excellent opportunity to diversify and expand your skill set, qualifications and marketability. In many cases, membership CSC leads directly to advanced education and training programs, which helps you, maintain your edge and keep your skills sharp and current.

### ACCESS TO MEMBERSHIP DIRECTORIES:

CSC maintains a yearly directory, in which members' are listed with contact information. This can help you increase your exposure to new markets and potential clients. The directory also has great opportunities for sponsorship.

### COMPETITIVE ADVANTAGE:

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become the Contract Documents, initially. Then through the remainder of the Design Development and Working Drawings phases of the project, the final Bid Documents become the Construction Documents as defined in the contract. As defined in CCDC 5B Construction Documents means “The Construction Documents consist of the Specifications and Drawings that are consistent with the Contract Documents and are prepared by the Consultant and accepted by the Owner after execution of the Agreement for the performance of the Project.”. This definition accounts for the RFP documents issued at the time the contract is signed with the Construction Manager before the Bid Documents are finalized (“that are consistent with the Contract Documents”). Significant changes in the overall scope of the project may necessitate re-examining of the contract and the Construction Manager’s costs associated with its execution and completion. The Construction Documents become part of the final Contract Documents based on the amendment portion of the definition “The Contract Documents consist of those documents listed in Article A-4 of the Agreement – CONTRACT DOCUMENTS and amendments agreed upon between the parties.”. The pricing of the Bid Documents, the acceptance of the subcontract Bids and the execution of the subcontract agreements becomes the implied agreement to the amendments made.

According to the laws of bidding and tendering in Canada, the only way to modify the Bid Documents is either through an Addendum during the Bid Call Period or through a Post-Bid Addendum after Bid Closing Time. Established best practices for Drawing modification include the addition of “revision clouds” around areas of the Drawings changed by Addenda with a reference to the Addendum number for cross referencing to the appropriate Section.

MasterFormat® 2004 (the version that changed the system from 5 digit Section numbers to 6 digits) also established the Section number for Addenda as 00 91 13, so Addendum No. 01 would be Section 00 91 13.01, Addendum No. 02 would be Section 00 91 13.02, etc. It also established that Bid Revisions (or more commonly called Post-Bid Addenda in Canada) should be in Section 00 91 16, with the same .01, .02 suffixes added to the end of the Section number as required corresponding to the number of the Post-Bid Addendum. There is less of an established best practice for identifying changes made to the Specifications. I personally include the original text with strikethrough and the revised text immediately below. I then add “AD-D0X” corresponding to the Addendum number it is issued with, and I finally highlight the item with light gray shading for easy identification of the changes in the Section.

Since the Contract Documents are established by the Bid Documents as amended by the Addenda issued through the Bid Call Period and the Post Bid Addenda during Period of Irrevocability of Bids established in the Bid Documents after the Bid Closing Time, these are the documents that must be referred back to during the construction phase of the contract.

Requests for IFC documents have become much more common than when I first graduated over three decades ago. I think the increased overall complexity of projects coupled by the decreased time that is allotted to produce the Bid Documents has contributed to this increase. Back in the early 1990’s, having a large number of Addenda that would require the issuance of a Consolidation set of documents was seen as a failing of the Consultant team to have complete and coordinated Bid Documents ready before they are issued. Today it seems to be the expectation of most

Construction Managers and/or Subcontractors. I'm not sure all Consultants include a cost for the effort that may be required to produce IFC documents.

One thing with respect to issuing Addenda that should also be considered with the change to electronic drawing production and issuance is how Drawings included with Addenda are handled. Years back, an "excerpt" on either 8 1/2" x 11" or 11" x 17" format from a full size Drawing was often issued due to the cost of reproduction associated with printing hardcopies of full sized Drawings. These Drawings were often referred to as "sketches". The term sketch should always be avoided as a sketch has no definition in the Contract nor any standing within the Contract Documents, but Drawings do (despite their size). With electronic delivery of documents this method has truly become redundant as it actually increases the Consultants costs by having another Drawing to be manage. It also creates additional work to reprint the full sized Drawing for the IFC set. If the full sized Drawing is re-issued with the Addenda, the Drawing is kept up to date and no additional effort is required when it comes time to assemble the IFC set. From a Specification standpoint, it is much easier to revise the Section as described above and re-issue the complete Section. Yes this may increase the page count of the Addendum, but with the easy identification of the changes made, it should not be seen as a detriment. See more below.

Based on the information above, this is where the correct terminology and definition of what these documents are becomes paramount. The term Issued for Construction is associated with an implied warranty from the Consultant that those documents are somehow more complete or suitable to be used for construction of the project; that they can be relied on more than the original Bid Documents

including the Addenda. This implied warranty actually exposes the Consultant team to a higher standard of care than what may be accounted for in their Client-Architect Agreement or what their errors and omissions insurance covers and undermines what is established contractually as the Contract Documents.

While I don't disagree with the need for an IFC set of documents based on the challenges faced in completing more complex projects in a shorter (and sometimes unreasonable) time period, from a contractual standpoint, this set of documents is simply consolidating all the revisions made by Addenda and Post-Bid Addenda into one complete package for the convenience of all project participants. The letter C in IFC could be changed from Consolidation to Convenience without any change to the reason for issuing this set of documents. The only thing that really needs to change in the IFC documents is on the cover sheets of the Drawings and the Specifications from "Issued for Bid" to "Issued for Consolidation" and the date for easy identification of the "latest" hardcopy set of documents at the start of construction in the site trailer.

With the IFC set, the revision clouds referencing changes on the Drawings or highlighted changes in the Specifications back to Addenda should NOT be removed. Removal of the revision annotations completely negates the purpose these were added in the first place. In most cases, the Contractor's/Construction Manager's/Design-Builder's Project Manager or Coordinator, or Subcontractor's Project Manager or Foreman or even the Consultant's Contract Administrator were probably not involved in preparing the Bid Documents or the Bid and are simply given the Contract Documents at the start of construction. Without the knowledge of what was changed by Addenda, and being able to easily identify these changes

on the Drawings or Specifications, there is a possibility that unnecessary RFI's are submitted because someone was unaware of a change that was made by Addendum. By understanding that revision clouds will be left on Drawings permanently, will be a reminder to those producing the Drawings that discrete and focused revision clouds that identify the specific changes are preferable to one big revision cloud around half of the Drawing that captures 4 or 5 small changes.

The one final temptation that must be resisted by the Consultant team is to make undocumented changes to the Drawings either during the Bid Call Period or in preparation of the IFC documents because someone notices something that wasn't quite drawn correctly. If someone on the construction team discovers these kinds of undocumented changes, it can call into question what else has been changed with the perception that potential additional costs are trying to be avoided depending on the complexity of the change. This can have a negative effect on the working relationship and trust between the consulting team and the construction team.

I would also recommend that the cover pages of the Drawings and Specifications also include verbiage stating something to the effect of "The Consolidation Set is issued during the construction phase of the Project and contains a compilation of all Bid Documents issued during the Bid Call Period including Addenda and Post-Bid Addenda (if any) issued after Bid Closing Time for the convenience of the project participants. In the case of a difference between the Consolidation Set and the Contract Documents, interpretation for contract purposes will be based on the originally issued Bid Documents, Addenda and Post-Bid Addenda. [Consultant Firm Name] makes no warranty or

assurance as to the completeness of the Consolidation Set of documents."

Finally in closing, I would like to point out that if the guidelines discussed above are implemented, IFC sets issued by the Consultant have almost become redundant in their entirety with the advent of electronic document management software (such as Procore) that has become popular with all constructors. These electronic repositories are organized with individual files of each Drawing or Specification Section issued along when it was issued (Bid Call, Addendum No. 01 or 02, Post-Bid Addendum No. 01, etc.). Part of the functionality of these repositories is that a user can have the system assemble a set of the latest version of the various individual documents into a "compiled" set. If the constructor uploads all of the Drawings and Specifications that are re-issued or added by Addenda, the system will generate the IFC set for anyone who wishes to have a copy. This is not only true for the IFC set, but the system will always be capable of assembling the compiled latest version of the documents issued through Supplemental Instructions, Change Orders or Change Directives during the construction phase, thereby eliminating the possibility of anyone referring to outdated documents. And with more and more people carrying a tablet around with them to view documents on construction sites, this makes having the latest set even easier to maintain. With some of the perceived negatives associated with these systems, this is undoubtedly one of the positives.

If anyone reading this has questions about what I have discussed in this article, please feel free to reach out. I am happy to discuss it further in real time.

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## GOLF COMMITTEE MEETING



The CSC London Chapter met on February 18, 2023 to discuss the upcoming June 2023 Golf Tournament. The Committee consists of Jeff Halashewski, Paul Gerber, Brad Beharrell and Josh Bowman. Check out our guys hard at work!

Contact Jeff Halashewski at [London@csc-dcc.ca](mailto:London@csc-dcc.ca) if you are interested in volunteering on the day of the event



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## CODES AND STANDARDS UPDATE

### 2022 North American Fenestration Standard Published

The 2022 edition of AAMA/WDMA/CSA 101/I.S.2/A440, “North American Fenestration Standard/ Specification for windows, doors, and skylights” (NAFS) has been published. This standard is the result of a multi-year effort by CSA Group, Fenestration and Glazing Industry Alliance (FGIA) and Window & Door Manufacturers Association (WDMA). The updated 2022 standard replaces the 2017 edition, representing a continued evolution of the standard to improve harmonization across

North America. The 2017 NAFS standard is already referenced in the 2021 editions of the International Building Code and International Residential Code, with the recently released standard proposed to be included in the 2024 editions of these codes. The 2017 NAFS standard is also referenced in the 2020 edition of the National Building Code of Canada, with the recently released standard



IMAGE SOURCE: <https://essential.construction/news/2022-north-american-fenestration-standard-published/>

proposed to be included in the 2025 edition. The Joint Document Management Group (JDMG), comprised of representatives from all three associations, stresses the importance of NAFS-22.

### **Operating Force**

“Operating force tables were combined to include all product types and Performance Classes, and a single requirement identifies the maximum ‘force to initiate’ and ‘force in motion.’ This was done to both simplify and to harmonize requirements between Canada and the United States,” said Brad Fevold, Director of Regulatory Affairs for Marvin, who served as WDMA’s JDMG co-chair.

### **Door Requirements**

“Another change is that the Limited Water (LW) rating and designations for sliding doors were added to provide consistency for all door products. Finally, folding door assembly qualifications were revised and updated to include an additional sixth configuration to better reflect the breadth of product offerings in the market,” said Fevold.

### **Material and Components**

“‘Material and Components’ clauses were partitioned into ‘Requirements without Alternative,’ ‘Requirements with Alternative’ and ‘Design Guidance.’ In addition, prescriptive or redundant auxiliary and component tests were removed,” said Steve Fronek, P.E. and Vice President Preconstruction for Wausau Window and Wall Systems, who served as FGIA’s JDMG co-chair.

### **Concise Clauses**

To maximize continuous improvement opportunities, every clause in NAFS-22 was subjected to review and enhancement using time-tested, inclusive, consensus-based processes at each of the JDMG associations. “The result is a concise, quality-focused standard, allowing for end-product performance evaluation, as well as meeting secondary goals including product comparison, durability assessment and addressing technical certification issues,” said Fronek.

### **Canada/U.S. Harmonization**

Several Canadian-specific changes are reflected in NAFS-22. “NAFS-22 is a huge achievement for its impact on products intended for the Canadian market, as it has been harmonized to address both countries’ requirements,” said Robert Jutras, Chair of CSA’s Technical Committee and CSA’s JDMG co-chair.





IMAGE SOURCE: <https://www.glassonweb.com/news/2022-north-american-fenestration-standard-published>

In Canada, the selection of the water penetration resistance test pressure is still defined in accordance with the A440S1 Canadian Supplement to NAFS, and air exfiltration testing will now be required in the U.S.,” he added.

### Mulled Products

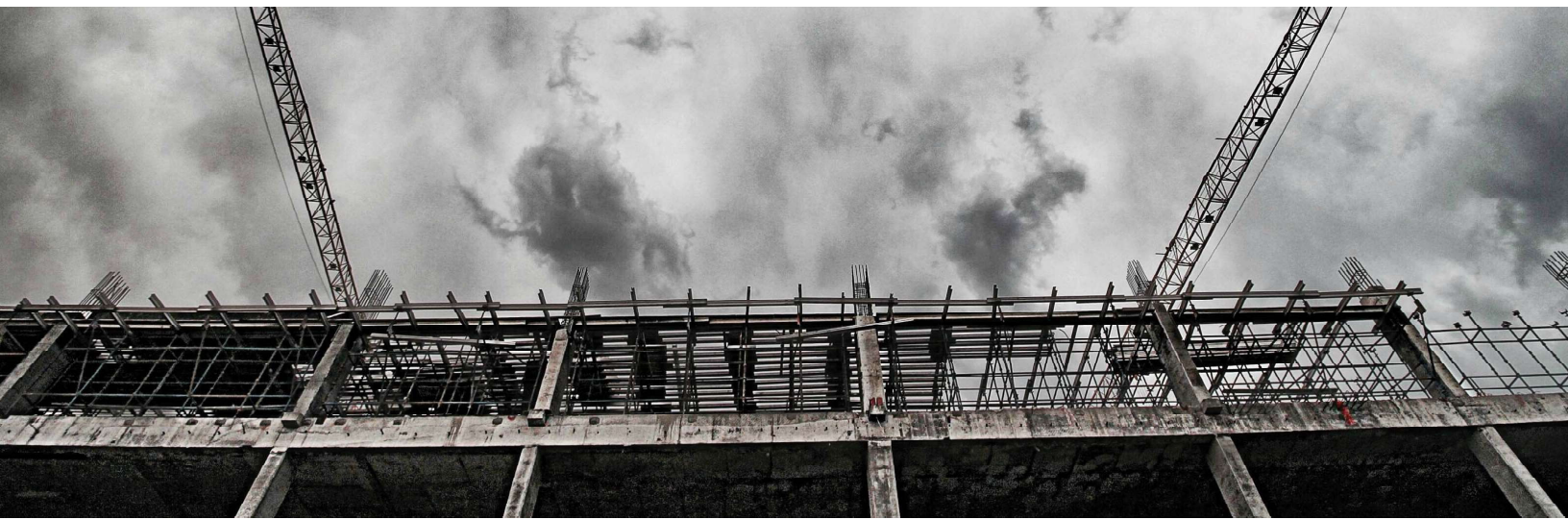
Additionally, Jutras pointed out an important change regarding evaluation of mulled products. This change was the transition from AAMA 450-10 to AAMA 450-20, which now includes provisions for evaluating mullions for composite window products. Finally, Jutras noted that the tables for the Available Performance Grade Requirements have been consolidated. “This was done to provide clarity for specifiers,” Jutras said.

AAMA/WDMA/CSA 101/I.S.2/A440-22 is available online purchasing from the CSA Group (<https://www.csagroup.org/store/>), Fenestration and Glazing Industry Alliance (<https://fgiaonline.org/store>) or Window & Door Manufacturers Association (<http://www.wdma.com/store>).

## UPCOMING CSC CHAPTER EVENTS

Date	Topic / Event
March 25, 2023	Chapter Meeting + Social at Palasad South (6:00 pm - 9:00 pm) Presentation on Event Planning by Jeff Halashewski.
April 4, 2023	[Toronto] CSC Toronto Chapter Plant Tour of ACE Climatic Wind Tunnel
April 18, 2023	Annual Chapter Meeting + Social at Palasad North (5:00 pm - 9:00 pm)
May 24 to 28, 2023	CSC National Conference - Calgary, Alberta
June 2023 (TBD)	London CSC Golf Tournament





## WELCOME OUR NEW 2023 MEMBERS!

**Kane Orton**, Sr. Sales Representative, Westlake Royal Building Products  
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## INDUSTRY ARTICLES & LINKS

Bubble Gun Testing of Site Installations (Air Barrier Association of America)

<https://www.airbarrier.org/wp-content/uploads/2022/12/Bubble-Gun-Testing-of-Site-Installations.pdf>

Understanding Ideal Applications for Ceramic Frit and Silicone Coatings

<https://www.glassmagazine.com/article/understanding-ideal-applications-ceramic-frit-and-silicone-coatings>

## 2023 / 2024 LONDON CHAPTER EXECUTIVE

DIRECTOR & PROGRAM EVENTS DIRECTOR:	JEFF HALASHEWSKI
CHAPTER CHAIR:	BRAD BEHARRELL
CHAPTER VICE CHAIR & MEMBERSHIP OFFICER:	MARK ZETTLER
SECRETARY (ADMIN) OFFICER:	ASHLEY HOWARD
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