



**FEBRUARY 2018**

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**NOVACSI BUFFET II**

**Artisan Rolls** and Caesar Salad  
**Sautéed Green Beans**, garlic butter  
 broccoli and cauliflower  
**Jasmine Rice Pilaf**  
**Grilled Salmon** with dill chardon-  
 nay cream  
**Roasted Chicken** with honey thyme  
 gravy, bone in chicken legs  
**Chef's Choice of Dessert**  
**Beverages:** Citrus Water, Sweet-  
 iced Tea, and Gourmet Coffee

**PRICES**

**Members:**..... \$18  
**Retired:** ..... \$35  
**Emeritus:**..... \$35  
**Non-Members:**..... \$48  
**Table Top:** ..... \$275

**SCHEDULE**

**6 pm:** Social hour  
**7 pm:** Dinner  
**8 pm:** Program

**LOCATION**

Washington Dulles Airport Marriott  
 45020 Aviation Drive  
 Sterling, VA 20166

Newsletter of the Northern Virginia Chapter Construction Specifications Institute

♥ **CHAPTER MEETING - FEBRUARY 14, 2018** ♥

# Opening Doors: Model Building Codes & Egress Design Opportunities

*For those who missed the January meeting, you did not miss the announced presentation. Our speaker was unable to attend and the program will be rescheduled.*

**Description:** This presentation will acquaint participants with how the myriad fire and life safety code requirements affect building egress, present design opportunities, and affect overall building design:

**Learning Objectives:** After attending this 1 LU/HSW/ Sustainable Design presentation, participants will:

1. Learn to differentiate between fire walls, fire barriers, and fire partitions;
2. Understand the regulatory standards governing the use and application of opening protectives;
3. Be able to examine case studies, learn the fundamental code requirements that drive the placement of fire walls and fire barriers, their openings, and opening protectives;
4. Through discussion, examples, and case studies, learn the correlation between life safety, product application, and open design.



*Speaker: Alexis Swingle*

**Speaker: Alexis Swingle** graduated from Loyola University Maryland, and has experience assisting architects with creating open designs without compromising fire & life safety code compliance.

She is currently an Architectural Marketing Associate for McKeon Door Company, and has established their first District of Columbia office in Old Town Alexandria. ❖



Register for the meeting at <http://novacsinet.starchapter.com> by noon February 12, 2017  
 Questions? Please send them to [csinorthernva@google.com](mailto:csinorthernva@google.com).

## Schedule of FY2018 Chapter Presentations

September 20, 2017

Building in the Late 19th Century

Speaker: Constance Lai

October 11, 2017

Elevator History and Technology

Speaker: Colin Harrang

November 8, 20167

Designing with Hardwood  
Veneer

Margaret Fisher, AWI

December 13, 2017

Understanding Air Barriers

Speaker: Larry Dawson, Henry Co.

(Postponed from December)

January 10, 2018 - 26st Anniversary

Understanding Air Barriers

Speaker: Larry Dawson, Henry Co.

(Postponed to future month)

☆ February 14, 2018

Opening Doors: Egress Design

Speaker: Alexis Swingle

March 8, 2018

Joint Meeting with AIA NOVA

Speaker: To be Announced

April 11, 2018

Building Information Modeling

Speaker: To be Announced

May 9, 2018

Permeable Pavements

Speaker: Scott Stannard

June 13, 2018 - Awards Night

Fire Rated Glass

Speaker: To be Announced

July/August 2018

Board Transition and Summer  
Planning Meeting

September 12, 2018

BIM, 3D Modeling &  
Interoperability

Speaker: Luke Faulkner, AISC

Future topics subject to change



## PRESIDENT'S MESSAGE

### Cynthia Heimann, NOVA CSI President

Dear CSI Members,

With all of the big names in design, there is one you may not have heard of until this past week. He was not a designer, but a great entrepreneur who brought contemporary design to the masses and revolutionized product design, manufacturing, and distribution. Ingvar Kamprad - do you know him? He used the initials of his name (Ingvar Kamprad) plus those of Elmtaryd, the family farm where he was born, and the nearby village Agunnaryd where he was raised, to name his company, known to us as **IKEA**.



Cynthia Heimann

His forte was not design. He commissioned and hired designers that could develop designs and details which afforded the most humble of us to incorporate modern designs into our homes, offices, shops, and dorm rooms. Legend has it that the flat-pack style was born when the first designer Kamprad commissioned could not fit his small side table into his car. Solution? Saw off the legs and reattach them once at his destination.

I don't know about you, but I have gone to IKEA and filled my Big Blue Bag with candles, vases, lighting, cooking utensils, and ginger snaps, then in addition, returned home with ready-to-assemble beds, couches, desks, tables, and bookcases over the years. And when any of these products need replacing, I am happy to make another excursion to this big box store.



Ingvar Kamprad

Kamprad founded Ikea in 1943 at the age of 17 and died at the age of 93 on January 27, 2018. The torch was passed to a new design director, Marcus Engman, around the time Kamprad stepped down from the company's board in 2013. His mission was to "bring high-end design values to affordable prices." Who can argue with that? ❖

Cynthia

## 2018 REGION CONFERENCE SPONSORS - CHECK OUR WEBSITE

Here are some essential facts sponsors need to budget for sponsorships.

**Host Chapter:** Northern Virginia Chapter CSI.

**Conference Dates:** April 19-22, 2018.

**Theme:** Building Enclosure--Top to Bottom.

**Location:** The George Washington Wyndham Grand Hotel, Winchester, Virginia.

**Expo:** Display tables will be set up on Thursday, April 19 for the Welcome Reception.

**Check out the website at:** [www.marc2018.com/sponsors.html](http://www.marc2018.com/sponsors.html) for Sponsorships:

**Table top displays at the Welcome Reception are now available at the Silver Level!**

**New PayPal option for sponsor payments and conference registration.**

**Conference Events:**

**Technical Sessions:** Six 1-hour presentations covering the roof down to the foundations.

**Luncheon Features:** Two motivational presentations related to chapter management.

**Total AIA Credits Hours:** Estimated at 6 to 10.

**Group Tours:** Museum of the Shenandoah Valley, designed by Michael Graves.  
Shockey Precast Concrete Plant.

**Questions:** Contact Bill Rains, [bill.rains@sherwin.com](mailto:bill.rains@sherwin.com), (301)902-3229.

**Pass this information on to potential sponsors. ❖**

## NOVA MEMBER CSI ANNIVERSARY DATES

### January 2018

David Lorenzini..... 44 years  
Architectural Resources Co.

Daniel Piper ..... 20 years  
The Preston Partnership

Jason McKay ..... 18 years  
Isolatek International

Allan Montello ..... 4 years  
Atas

Zachary Booker ..... 1 year  
Historic Preservation Specialist

## RENEWAL DATE REMINDERS

### February 2018

Zachary Booker .....2/28/2018

Jason McKay .....2/28/2018

Daniel Piper.....2/28/2018

### March 2018

Scott Ewing, CSI .....3/31/2018

Eli Howard III.....3/31/2018

Daniel Lemieux .....3/31/2018

Fred Rudiger Jr. ....3/31/2018

### April 2018

Alan Geary .....4/30/2018

Amy Kilburn .....4/30/2018

Michael Montgomery ..4/30/2018

Anthony Stazzone .....4/30/2018

Michael Stenberg.....4/30/2018



**FEBRUARY 14, 2018**

## BUILDING ENVELOPE? - OR - BUILDING ENCLOSURE? PART 2

**Authors:** Joseph Lstiburek, Building Science Corporation; Peter Yost, Director of Residential Services for BuildingGreen; John Straube, Building Science Corporation; Allison Bailes III, Energy Vanguard.

**Submitted by** Sheldon Wolfe, RA, FCSI, CCS, CCA, CSC



Max Planck

POSTED ON NOVEMBER 21, 2012 BY ALLISON A. BAILES III, PHD

When I wrote about the debate over the terms “**building envelope**” vs. “**building enclosure**” recently, I favored the former but overall felt agnostic on whether we should choose one over the other. I didn't think I'd change my mind. After reading the many comments from readers in the Energy Vanguard Blog and in the two LinkedIn groups where I posted the article as well, I have indeed decided that we should go with one of the two terms and abandon the other.

Although I've framed this debate as being between only the two terms I mentioned above, some of the commenters suggested other terms as well: building fabric, building shell, and building perimeter. Some also proposed a compromise approach using a combination word: envelopure or encllope. Another contingent said it doesn't really matter what you call it as long as the meaning is clear to all parties.

Here's why I think it does matter, though. Building science is a young science, crafting its own identity only in the 20th century. In contrast, physics has been around for thousands of years, and a lot of the material students learn in introductory physics classes is hundreds of years old. The battles over the fundamental terms is long over in that most fundamental of the sciences but still raging in one of the newest, **building science**.

It's important for experts in a field to agree on the terminology for ease and clarity of communication. Although the majority of people see “speed” and “velocity” as synonyms, for example, every physicist knows there's an important distinction (velocity includes the direction) and uses the correct term when speaking about motion. “Envelope” and “Enclosure” don't have different meanings (yet), but it's still important to choose one to avoid confusion.

**Max Planck**, the physicist who first recognized the quantum nature of radiation, and whose portrait is shown above, once wrote: *“A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather its opponents eventually die and a new generation grows up that is familiar with it.”*

This may not be about a scientific truth, but those who write the building science textbooks and teach the building science courses seem to have made their choice already. Their term is “**building enclosure**”. As the field develops, more and more people will be exposed first to that term, and those who prefer “**building envelope**” or other terms will die out.

Well, OK, that may not be exactly how it plays out, but I do think “building enclosure” is the better term to use. I've resisted it up till now because I was more comfortable with “building envelope” and because I wanted a better reason than the quip given by Joseph Lstiburek (“Envelopes are for Fedex; enclosures are for engineers”).

Here's what's changed my mind: It's confusing to have multiple terms in use for the same concept, especially one as fundamental as the boundary between conditioned space and the various types of unconditioned space. “Building enclosure” is already taking over the building science programs. I now believe “enclosure” is a better word for this concept than is “envelope.”

Precision of language matters. **The building enclosure is one of the most fundamental concepts in building science, and it does make sense to use a single term to describe it.** I'm now a convert to “building enclosure” and will use it exclusively. ❖



## INVITATION TO BUILDING ENCLOSURE 2018

The Northern Virginia Chapter CSI  
invites you to the

## Middle Atlantic Region CSI 2018 Conference

April 19-22, 2018 - Winchester, VA



"BUILDING ENCLOSURE - TOP TO BOTTOM"  
MARC2018 - Winchester, VA - April 19-22, 2018

The Northern Virginia Chapter CSI is taking the 2018 Middle Atlantic Region Conference to new heights, **with a new location, and with new events**. The Winchester, Virginia area, as well as other key historic landmarks in western part of Northern Virginia, will be showcased.

There's so much science involved in **Building Enclosure** technology that conference attendees at **MARC2018** will benefit from speakers who bring the latest in expert research, technology, code requirements, and specifications recommendations to this critical aspect of building construction.

While in the heart of the **Shenandoah Valley**, enjoy the mountains, country air, pedestrian mall shops, museums, historic revolutionary and civil war sites, and numerous regional tourist attractions.

Plan to join us at **The George Washington Wyndham Grand Hotel** in Old Town Winchester, VA in April.

The Middle Atlantic Region CSI includes Pennsylvania, southern New Jersey, Delaware, Maryland, Virginia, and Washington DC, an area that represents about **1000 professional members**. Special one-day registrations will make the technical programs available to the construction industry from the entire region.

Check out the Conference website at [www.marc2018.com](http://www.marc2018.com).

The Conference Registration process is now available! Click on the [Registration](#) link.

Hotel Reservations are now available. Click on the [Hotel Reservations](#) link for instructions.

The annual **Middle Atlantic Region CSI Conference** is always a terrific opportunity for personal and professional networking, chapter leadership development, and renewing CSI friendships. The Northern Virginia Chapter CSI is hosting its second conference since being chartered 26 years ago in **one of the fastest growing areas of the country**. An array of outstanding technical seminars and social events are being planned for region members and guests while still leaving time to experience the excitement of **Winchester's Walking Mall** and the spectacular scenery of the Shenandoah Valley, as well as the rural landscapes of the Shenandoah Mountains and nearby **Skyline Drive**.

The theme of **Building Enclosure 2018** was selected to focus on the importance of the building envelope from roof to foundations and the technology options that are still being introduced to optimize efficiency and cost to meet today's environmental challenges.

You will find a **revitalized conference** with a new look and a new schedule. Immediately following the always popular Golf Classic and Sporting Clays on Thursday afternoon, a **Welcome Reception on Thursday evening with sponsored table top product displays** will give you a chance to rekindle old friendships and create new ones while viewing the latest in building products and services. There will also be time to explore the dozens of unique restaurants, shops, and entertainment right outside the door of the George Washington Grand Hyatt Hotel.

A key feature of this year's conference is the opportunity for everyone—members and guests alike—to participate in events from Thursday evening through to the farewell breakfast buffet on Sunday morning. In between you will attend special Technical Sessions to hear from experts in the field of Building Enclosure and Chapter Leadership, try your luck at the Friday night **Casino Event**, tour the **Museum of the Shenandoah Valley designed by Michael Graves**, and indulge yourselves at the **Awards Banquet**.

We invite you to come to a **unique part of Northern Virginia** to broaden your professional friendships and enhance your ability to serve our industry and the Middle Atlantic Region. ❖

## MARC 2018 TECHNICAL SESSIONS

Take advantage of the technical sessions on our Building Enclosure theme, presenting the key elements from top to bottom in sequence order. There will be six one-hour sessions. **These sessions qualify for AIA HSW Continuing Education Units.** Speaker bios are available on the conference website at [www.marc2018.com](http://www.marc2018.com).

### TECHNICAL SESSION 1

**Topic:** *Water Retention/Detention Vegetated Roofing*

**Speaker:** Oscar Warmerdam, SemperGreen

**Description:** Green roofs are a departure from typical horticulture where the garden is a largely aesthetic offering. A green roof also has plants like a garden, but is mostly a tool with different priorities and concerns. The performance of the plants over time are now vital in regards to wind uplift, soil protection, and erosion control, and at the same time, the system needs to have longevity and continue to function as a tool. First and foremost, it simply needs to manage stormwater.



Oscar Warmerdam

### TECHNICAL SESSION 2

**Topic:** *Wind Uplift, Vegetated and Non-Vegetated Roofing*

**Speaker:** Richard Hayden, RLA, ASLA, American Hydrotech

**Description and Outline:**

Wind design background

Wind warranties

Practical Applications

Wind Ballasting reviews

Mitigating Wind Pressures

Combining ballasting with green



Richard Hayden

### TECHNICAL SESSION 3

**Topic:** *WUFI Analysis Explained*

**Speaker:** Alejandra Nieto, MBS, Rockwool Inc.

**Description:** WUFI (Wärme Und Feuchte Instationär), meaning transient heat and humidity, is a software program used to help predict and understand the performance and durability of different assembly configurations under specific climatic and environmental conditions. It is recognised as an essential tool in designing high-performance building enclosures in the architectural and consulting industry, and is often used to influence design decisions in both new construction and retrofit projects. The inputs used in the modelling are critical to ensure appropriate representation of the assemblies.



Alejandra Nieto

### TECHNICAL SESSION 4

**Topic:** *Air Barriers: Where You Are Matters*

**Speaker:** Steve Gordon, PPSI

**Description:** Controlling heat flow, airflow, moisture flow, and solar and other radiation will affect the interactions among the physical elements of the building, its occupants, and the environment. Air barriers are systems of materials designed and constructed to control airflow between a conditioned space and an unconditioned space. The air barrier system is the primary air enclosure boundary that separates indoor (conditioned) air and outdoor (unconditioned) air. Air barrier systems also typically define the location of the pressure boundary of the building enclosure.



Steve Gordon

### TECHNICAL SESSION 5

**Topic:** *Curtain Wall*

**Speaker:** Alan Geary, Curtain Wall Design Consulting

**Description:** This presentation will be an overview of design and performance attributes of glass and framing options frequently used in commercial construction. While focusing on "curtain wall" and defining what that term means, it will be compared with similar "storefront" and "window wall" designs.



Alan Geary

### TECHNICAL SESSION 6

**Topic:** *Commissioning of Building Enclosure*

**Speaker:** Keith Nelson, Intertek

**Description:** Building Enclosure Commissioning (BECx) is relatively new to the design and construction industries. This presentation will provide a primer on the practice of BECx and its benefits with real world case studies and then dive further into the various approaches as defined by industry standards and code. ❖



Keith Nelson

## Chapter Board of Directors

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2018 Region Conference	David Lorenzini, Bob Trafton, Alan Geary ..... <i>(see above)</i> William Pegues ..... <i>wpegues@mac.com</i>

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## Institute

Director Marvin Kemp ..... *mkemp@designcollective.com*

## MARC 2018 - WINCHESTER & HOTEL



View of Winchester City Rooftops



Ballroom of The George Washington, A Wyndham Grand Hotel in Winchester, Virginia

**Winchester, Virginia**  
**MARC 2018**  
**April 19-22, 2018**



**Editorial Policy:** NOVASPEC acts as a moderator without approving, disapproving, or guaranteeing the validity of accuracy of any data, claim, or opinion appearing under a byline or obtained or quoted from an acknowledged source. The opinions expressed by authors do not necessarily reflect the official views of the Northern Virginia Chapter CSI or The Construction Specifications Institute.

All material for each issue must be received by the Editor 3 weeks before the next Chapter meeting date.

**The Construction Specifications Institute (CSI)** is a nationwide, nonprofit, technical organization dedicated to the advancement of construction technology through communications, education, research, and service. Founded in 1948, CSI provides a forum for architects, engineers, specification writers, contractors, suppliers, and others in the industry.

**Our mailing address:** Northern Virginia Chapter CSI, PO Box 223415, Chantilly, VA 20153, 703-402-0903, <http://nova.csinet.org/>

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## MARC 2018 SPONSOR NEWS



RECEIVED IN  
DECEMBER

### Silver Sponsor

## Tnemec Company / Mid-Atlantic Coatings

Tnemec Company, Inc. has been a leading manufacturer of coatings and coating systems for exterior and interior environments. The company has sustained its pioneering heritage with the development of high-performance industrial coatings, designed for a range of applications from superior abrasion, chemical and corrosion resistance to interior linings, seamless flooring and wall systems, and fluid-applied thermal insulation. Tnemec architectural coatings are known for their unequaled aesthetic appeal, fade-resistant colors, and high gloss retention.

