# **IIBEC-WCC TELEGRAM**

**Autumn 2021 Edition** 

### **WELCOME TO AUTUMN (aka FALL) 2021!**



International Institute of Building Enclosure Consultants (IIBEC)
Western Canada Chapter

Hello fellow IIBEC-Western Canada Chapter Members! The leaves are turning their lovely fall hues, and after months of complaining about the heat of the Summer, we can now finally begin to complain about the rain & cold again! What a summer it was! I am in fact surprised there are still tree lined streets in our fair city with lumber prices reaching the levels they did, the streets were literally lined with gold! The "new normal" is the new normal thing to say and I would hate to disappoint, lumber prices have returned to their roots, but the "new normal" for everything else seems to be the very steady climb up the price coaster with no peak in sight. Think of all the great challenges and problems we will get to solve in the coming years figuring out how to adhere systems with no glue and no screws!

Apart from all these things that make our jobs fun...I know some of you out there have been holding your breath anxiously awaiting more news for your local IIBEC Chapter. Your lives revolve around it, you know few other joys. My friends let's have a great big exhale; life can now go on! What's coming up you may be asking? How can I get some credits? Well, let's talk about it!

#### October 2021 IIBEC Webinar Seminar – REGISTER NOW

Stay in the comfort of your home or office and join us Wednesday October 20<sup>th</sup> 2021 8:30 am - 12pm for our upcoming Fall Webinar Seminar where you will be rewarded with not only a very informative program of speakers but as an added bonus we are also including "free" with your paid subscription no less than 3 IIBEC Continuing Educational Hours!



What will you be learning about you ask?

Considerations for Installation of Amenity Spaces on Existing Roofs – Kelly Cronin, PE, Suzanne Thorpe, PE, Emmett Horton, EIT - Wiss, Janney, Elstner Associates

#### **Overview:**

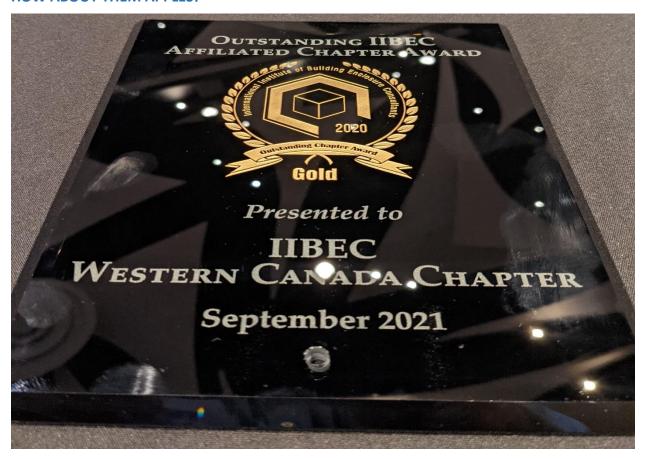
Having an outdoor rooftop amenities space is changing from a luxury to a requirement for most buildings. To meet this need, a popular new trend is arising in the renovation and restoration of existing buildings: converting the traditional, unoccupied roof space into an amenity space for building occupants to share and enjoy. While this conversion often increases value and occupancy, it comes with its own set of challenges. Typically, if the original roof design did not include accessible tenant space, the redesign of the in-service assemblies must be evaluated in a completely new context. Adapting a traditional roof space into a useable amenity space requires thoughtful design and consideration of various aspects of the conversion to ensure a successful transformation. While every project is unique, there are several typical items to consider during the design phase that will improve the overall success of renovating a traditional roof area to a modern rooftop amenity terrace. These include structural, waterproofing, safety, and aesthetic considerations.

Sealing the Building Envelope--Principles, Products & Practice Envelope – Bashar Moussallieh, MBA, MSc, PMP, C. chem.- Emseal

#### Overview:

- 1) Analyze how watertight, energy efficient, fire-rated expansion joints are the consequence of a process in which we: Design, Detail, Specify, Bid, Erect, Manufacture, & Install in 3-D.
- 2) Be familiar with product technologies and how to apply them.
- 3) Why it is critical to require certified performance reports in your specifications.
- 4) Know that your next building can be a watertight structure.

## WHAT'S BEEN HAPPENING AT YOUR LOCAL CHAPTER? HOW ABOUT THEM APPLES!



That's right, your very own local chapter has received the coveted outstanding chapter award Gold Edition! Here you were thinking we were just a bunch of good-looking people meeting for breakfast!

#### THANKS FOR COMING OUT TO THE ANNUAL COVID IIBEC-WCC GOLF TOURNAMENT...

Well we certainly would have thanked you if we held the tournament! Alas friends we chalk another missed tournament down to the dastardly red spiked devil, it was a close call this year and we are very much looking forward to hosting everyone on the links as soon as we can. Below is a picture of what it likely would have looked like had we been able to enjoy a day together on the course. I am very optimistic about 2022!



#### FROM YOUR TECHNICAL COMMITTEE:

From one of the top five hardest working committees in the chapter our technical committee is always on the forefront of bringing you timely and useful information to make you seem just that much smarter to your clients. With that they wanted to make you aware that the NRC has released Energy RCI which is the <u>Effective R-Value Calculator</u>.

Energy-RCI is a web application for the thermal design of low-slope membrane roof assemblies. This web tool determines the overall effective R-value of the roof assembly and verifies its compliance with the following codes and standards:

National Energy Code of Canada for Buildings (NECB 2015)

American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) Standard 90.1, "Energy Standard for Buildings Except Low-Rise Residential Buildings," versions 2016 and 2019

Energy-RCI is conceptualized from the research outcomes of the consortium study, Energy Resistance of Commercial Roofs, developed by the National Research Council of Canada (NRC) in collaboration with industry and government partners, including the National Roofing Contractors Association, the Canadian Roofing Contractors Association, the Roofing Contractors Association of British Columbia, Roofing Consultants Institute (now International Institute of Building Enclosure Consultants), Sika, Trufast, EPS Industry Alliance, Rockwool, Soprema, 2001 Company, and Natural Resources Canada - Program of Energy Research and Development (PERD).

#### **DETAILING OF CLAMPING RING DRAINS**

#### By Stefan Hanelt, RSE, AScT, RRO, GRP

Years ago, when I was still a roofing foreman, there was a task I would have not passed on to anyone else on my crew: to detail a membrane clamping ring drain with SBS membrane. It was imperative to me that the most critical detail on the roof is being completed with the most care. What is it that makes these drains so special and what do we need to know about them when we want to detail them with a 2ply SBS roofing membrane system?

Membrane Clamping Ring Drains are the drains of choice for protected membrane roof systems, plaza decks, ground slabs, and conventional roof systems. They are available in many different styles, shapes and metals to suit any design needs. The main idea of such type of drain is that the roofing membrane system is secured via compression by a clamping ring to the drain body. Some of these drains rely on just that and have a very slim flange which barely allows the roofing membrane to overlap the drain flange. Some others have a fair-sized flange and the membrane clamping ring can be seen as a second line of defense.

I always come across 2ply SBS projects where a roofing contractor is ordered by his client to waterproof a concrete slab with the base membrane layer, and the cap membrane layer is planned to be installed a few weeks or even months later. All these sites have one thing in common: the membrane clamping rings are stored in a safe location until the cap membrane has been installed. Let's be honest, how good is the seal to a membrane clamping drain without the actual clamping ring? How much abuse can the bond take by other trades before it fails? In addition, is there a benefit to installing a clamping ring after the fact, and compressing a cooled off membrane, or could this possibly result in unwanted stress to the bond of the membrane and drain body?

My preference on how to detail a membrane clamping ring drain (which was and still is a requirement in the country I was born):

- Tip #1: A single layer of base membrane needs to cover the entire drain flange. There should be no "double-bite" which is a requirement for non-clamping ring drains. If the installer leaves some parts around the bowl without the base membrane, how can the clamping ring work properly? The chance of uneven compression is way too high.
- Tip #2: The clamping ring needs to be installed immediately after membrane installation, while the membrane is still warm. It's not just easier and faster, this technique will also form the membrane into its BEST final position. In order to do so, the membrane installer should ensure that the clamping rings are available on site, unbroken and ready to be installed prior to the base membrane installation.

• Tip #3: If the contractor is asked to only install the base membrane due to phased construction methods, why not install a sufficient piece of cap membrane including the clamping ring as described in #2. With this method the drain detail will get fully completed and never needs to be touched again.

Another way to improve the most important detail on a roof and to mitigate applicator error would be the implementation of a standard which regulates the minimum size of flanges for membrane clamping ring drains. Until the industry has agreed on common ground, we will continue hearing the contractor say: "don't worry, we can make it work", and find drains leaving us simply speechless.



The "Hideaway"

The "Sunshine"



The "Ring-is-gone"

The "Hoverring"

#### PICTURES FROM YOUR OFFICE



Ever wonder what it would be like to work on the moon?

#### WE NEED YOUR HELP!!

We are looking to add some content to our newsletter and are hoping to get some crowd participation!

- PICTURES FROM YOUR OFFICE: Everyday we are out and about our great province and
  city seeing some of the most interesting views you can see, best seats in the house as
  they say! See a spectacular view you would like to share with your peers? Send in your
  photos to <a href="mailto:sean@roofixinc.com">sean@roofixinc.com</a> and we can include them in the next issue. Winning
  submission receives a \$25.00 gift card.
- INDUSTRY ANNOUNCMENTS: Did you or one of your colleagues get a promotion? Did something great happen at your firm? Is there a new hire you would like to acknowledge, or did someone receive their RRO? Send in announcements you would like to see included in the next issue of the IIBEC-WCC Telegram to <a href="mailto:sean@roofixinc.com">sean@roofixinc.com</a>.



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