

Please scroll

Number 172

ABEC South - 4th Wednesday
Luncheon Talk

February 23, 2011

Thermal Performance of Fiberglass Windows

Presenter: **Mike Battistel, Vice President of Cascadia Windows & Doors**

Topic: You would think, by now, that the functional and aesthetic requirements for windows, as well as the techniques for making installation and service life virtually trouble-free, would be well-understood. Thermal performance ranks high on the list, but requires attention to detail and a well-thought-out and robust design if it is to be achieved. Mike will have two samples on hand to illustrate best practices for the increasingly popular fiberglass windows.

Bio: **Mike Battistel** is one of those rare individuals who first learned the window installation trade from the ground up, and then acquired a thorough understanding of the academic basis for best practices in his industry, with remarkable achievements along the way:

1. As a Lead Hand Glazier and journeyman carpenter, he did window installations and supplied contracting services for more than 40 large residential and commercial projects over eight years.
2. **Mike** completed the BCIT Architectural Building Engineering Technology Program in 1998, with honours, and came away with two Building Science Awards for outstanding achievement, from ASHRAE, and BCBE/BCIT.
3. He started at RDH as a building science technologist, moved quickly up to managing their Field Services, and over 6 years led condition assessments on RDH projects in BC, Washington, Oregon, California and New Zealand. He became a Principal of RDH, and contributed to their publications as well as those of CMHC, on studies of water penetration and best practices for window installations.
4. In 2008, **Mike** joined Cascadia Windows & Doors, where he applies his wide range of expertise in all aspects of cutting edge technology for thermal efficiency and high water penetration resistance of fiberglass fenestration products.

Attendance at the Yard & Croasdale talk in January: 57 ; Bar sponsor Brian Rossetti, Henry/Bakor

Continuous Insulation under Cladding for Commercial Walls

Presenter: Les Yard, Dow Building Solutions, Scott Croasdale, JRS Building Engineering

Topic: Les and Scott have planned a thorough treatment, from the perspectives of the manufacturer and the building engineer respectively, of commercial wall design using continuous insulation under the cladding. Here is an abbreviated outline for this ambitious presentation starting with Part I, as the Manufacturer sees it:

1. Sustainability concerns - the global problem, and what we are doing about it, followed by a definition of Green Building design and the impacts of energy efficiency and the insulation.
2. Increasing regulation and mandates over the gamut of jurisdictions from global to provincial.
3. Thermal performance of steel stud walls, the impact of thermal bridging and the effects of condensation plus air in- and ex-filtration. The next subtopic sounds a bit mysterious: the "ci" solution.
4. Ahah, I just got it: continuous insulation! We will hear about Standards compliance, case studies, and cladding attachment and testing solutions. Then, it's on the Part II, the Building Engineer's take:
 1. Energy Use, and the increasingly important role of Thermal Insulation, driven by tougher Energy Codes.
 2. Modes of Heat Transfer, and the distinction between R-Values for the Assembly and for the Insulation.
 3. Design and construction considerations for continuously insulated wall systems.
 4. And for the finale: CI projects and case studies.

Bios: Les Yard has directly supported Dow customers in the use of their Building Solutions products for the past 7 of his 13 years in the building industry. As a technical sales rep, he provides for training, spec development, procurement plus information on warraDow is a \$52B manufacturer of chemicals and plastics; Dow Building Solutions started 60 years ago with Styrofoam to build a legacy of energy savings for the commercial and residential construction industry.

Scott Croasdale is a Principal of JRS Engineering with 15 years of experience consulting on new and rehab projects of all types, with special expertise in building envelopes, cost estimation, project planning and contract administration. His regular engineering investigations have focussed on structural and thermal design. Scott received Bachelor of Applied Science and Master of Engineering degrees from UBC. He is licensed to practice engineering in BC, Washington, Idaho, and Oregon.

Attendance at John Riley's talk in November: 31 ; Bar sponsor InterCoast Distributors

Number 170

ABEC South - 4th Wednesday
Luncheon Talk

2010-11-24

Detec Moisture Intrusion Systems

Presenter: John Riley, CPMR, BSc (ForEng), InterCoast Sales Agency

Topic: Detec Systems provides leading-edge technology in the field of automated structure monitoring, civionics, indoor air quality and roof membrane integrity scanning. The patented technology has served the telecommunications industry for over 25 years, protecting fibre optic cable routes against the damages of concealed water intrusions. This technology is now being applied to the construction industry to provide risk mitigation for property owners and their development teams. The goal is to improve the sustainability of buildings through monitoring of structures, including the use of roof scanning technology.

Providing early-warning of moisture intrusion, Detec benefits all stakeholders throughout the construction phase, including developers, design professionals, contractors, and insurers. Detec continues to provide value for facilities managers, homeowners, and building occupants throughout the life of the building, by identifying dangerous moisture intrusion events before they become costly repairs.

Bio: John Riley is the Founder of InterCoast Sales Agency. Originally an Ontario native, he moved to Edmonton 25 years ago. While still in Ontario he attended Lakehead University in Thunder Bay and graduated with a Bachelor of Science in Forestry Engineering. Prior to founding InterCoast Sales John worked as a sales representative for companies such as Fiberglas Canada and W.R. Grace. He was also the director of business development for IT S. Warnock Hersey in their quality assurance division.

John has over 25 years of professional sales experience in the forestry and construction industries and a thorough understanding of building envelope issues combined with a passion for environmentally sound, green building practices. He is also an active member of many industry organizations - Alberta Building Envelope Council, Construction Specifications Canada to name a few. Most recently John has earned his Certified Professional Manufacturers Representative certification from Arizona State University.

Attendance at the Talisman Centre Tour: 33 ; Bar sponsor (none)

Number 169

ABEC South - Talisman Centre site visit

2010-10-27

Talisman Centre Roof Replacement on-site Visit - 40-person LIMIT

Presenters: Randy Smith and Roger Miller, Williams Engineering Canada

Event: ABEC South is pleased and privileged to have this rare opportunity for another great site visit, but we must emphasize the limited numbers allowed: two groups of 20 individuals each will be conducted around the site. Each lucky person **must** show up on time equipped with **safety glasses, steel-toed boots**, construction grade **hard hat**, and **highly visible vest** worn **outside** your other clothing.

Lunch at Ed's and other details: Meet at Ed's Restaurant (202 17th Avenue SE) at 11:30 AM and eat 12:00 - 12:45 PM. Bruce Tingley (Safety Officer with Dominion Construction) will provide a safety orientation. After the meal we will walk over to the Talisman Centre and break into two groups of 20 for 45-minute tours led by Randy and Roger respectively. So just how can you arrange to be one of the lucky 40? Well, several positions have been taken already, and those remaining will go quickly. Your chances are slim if you are slow to register with Jonathan. **For this event, please notice the tighter cut-off: noon Friday, and only one per firm.**²

Attendance at Don Zakarisen's talk 50 Bar sponsor Harry Koyle, IRC Bldg Sci. Group

Number 168

**ABEC South - AGM + luncheon
presentation**

2010-09-22

What's up with the Precast Industry: an overview, plus insights from techniques to emerging technologies

Presenter: Don Zakariasen, Lafarge North America - <http://lafarge-na.com>

Topics: Immediately after the AGM (Treasurer's report, **nominations** for the Board of Directors, currently as shown below, and **voting!**), Don will bring us up to date on what is going on with Precast:

1. **Industry overview**
2. **Forming techniques**
3. **Insulated composite versus non-composite panels**
4. **Finishes: form, texture and colour, brick and stone**
5. **Cost drivers, and emerging technologies.**

Bio: Don is the Director for Marketing, Concrete Products in Western Canada. He has served two terms as Chairman of the Canadian Precast Concrete Institute (CPCI) as a Director of the American Precast Concrete Institute (PCI). He was the General Manager of LaFarge's Precast Businesses in both Edmonton and Calgary. Don has spent 36 years in precast and related businesses. In addition to his LaFarge experience, he was for 10 years President and CEO of Bonnybrook Custom Steel Forms Ltd., which specialized in steel form design and manufacture for the North American precast market.

Number 167**ABEC South - Advance Notice of AGM****August , 2010****No meeting in August, but members, please send Nominations for Directors to Past President****Past President: [Bob Passmore, Building Science + Architecture](#)**

Topic: First order of business is the AGM, including financial report by the Treasurer, and call for any further nominations for the board of directors, which is currently as shown below. Details for the luncheon presentation of September 22nd will appear in the regular September Newsletter.

POSITION	back to home page ABEC South Executive 2009-2010	CONTACT
PRESIDENT	Dennis Looten Asset Consulting & Inspections Ltd.	phone 276-7411 email: dlooten@ircgroup.com
PAST PRESIDENT	Bob Passmore Building Science + Architecture	phone 703-7535 email: bpassmore@bsaa.ca
VICE PRESIDENT	Mike Dietrich Morrison Hershfield	phone 246-4500 / fax 246-4220 email mdietrich@morrisonhershfield.com
SECRETARY	Randy Smith A.D. Williams Engineering Inc	phone 263-2393 email: RSmith@adwilliams.com
TREASURER	Gene LaVallee Dryvit Systems Canada	phone 560-8627 email: gwlavallee@dryvit.ca
EDUCATION/SEMINARS	Jim Posey Posey Construction Specifications	phone 949-4926 email: jpo@persona.ca
MEMBERSHIPS	John Vlooswyk Building Envelope Engineering Inc	phone 540-6562 email: john@beei.ca
NBEC REPRESENTATIVE	Anton Vlooswyk Building Envelope Engineering Inc	phone 651-1514 email: anton@beei.ca
PROGRAMS	Darrin Newnham JMS Construction	phone 510-1584 email: darrin.newnham@platinum.ca
PROGRAMS	Tom Knott Borealis Building Consultants Ltd.	cell 403-614-3594 email: borealisbuildcon@yahoo.ca
PROGRAMS	Kris Wall Read Jones Christoffersen Ltd	phone 338-5836 email: kwall@rjc.ca
REGISTRATIONS / FACILITIES	Andrew Ross Halsall Associates Limited	phone 255-7946 email: aross@halsall.com
WEBSITE/NEWSLETTER	Alan Dalglish Wind loading, Glass strength, Durability	phone 286-2177 email: alandalg@shaw.ca

Attendance at May talk by Marc Tropper was 37 bar sponsor Brian Rosetti, Henry

Number 166

**ABEC South - 4th Wednesday
Luncheon Talk**

2010-05-26

Controlling Air Leakage and Rain Penetration in Building Restoration with Vapor Permeable Air Barriers

Presenter: Marc Tropper, Bakor/Henry

Topic:

The goal of a designer should be the elimination of uncontrolled air leakage through the building's exterior envelope. <??>

The retrofit of existing buildings can provide unique building science challenges since existing wall components must be incorporated into the solution. In many instances, existing vapor barriers or insulation must remain in place; therefore, limiting the use of traditional non-permeable air barrier membranes. The use of vapor permeable air barriers can offer designers more design flexibility in the placement of air barriers within existing exterior wall assemblies. Furthermore, membranes which can combine the function of a weather resistive barrier and an air barrier can minimize the impact of water infiltration while providing a more energy efficient wall assembly. Part of today's presentation will cover the "Growing Use of Vapor Permeable Air Barriers in Building Envelope Restoration"

Bio:

Marc Tropper, P.Eng graduated from the University of Ottawa in 1991 with a civil engineering degree and is currently a professional engineer licensed with the PEO. Marc began his career as a building envelope consultant with IRC Consultants in Ottawa where he was involved with design and inspection of both new and remedial construction projects related to the building envelope (roofing, exterior walls and waterproofing)

Marc has been with Bakor/Henry Company for over 13 years and is currently its Director of Product Management for Air Barrier and Waterproofing products. He specializes in the development of new products and the technical improvements of existing products. Marc also has the responsibility of undertaking analysis of markets and economic research as it relates to Henry's product portfolio.

Next year in Winnipeg: 13th Canadian Conference on Building Science & Technology

In addition to the above link, which lays out important dates and guidance on papers, see more links below

Attendance at March talk by Randy Kiez was 41

Number 165

**ABEC South - 4th Wednesday
Luncheon Talk**

April 28, 2010

Energy Modeling: the ZEN of HOT2000

Presenter: **Randall Kiez, Atlas EnviroTech, Inc.**

Topic:

Energy modeling has become a viable business in Canada and the world in an attempt at reducing energy consumption and greenhouse gases in the built-world. Canada is known as world class in research and tools development and one of the most domestically popular of these tools is [HOT2000](#).

[HOT2000](#) software is used to determine how much energy each house could use and to assess the performance of residential (Part 9) buildings.

The [HOT2000](#) program for residential energy analysis was developed by NRCan (Natural Resources Canada). It began life as a 1982-vintage HOT-CAN program written in Apple Basic, grew through FORTRAN and MS-DOS and currently operates on a Windows based platform. It will be maintained by NRCan through version control into the foreseeable future.

The compliance software specified in the 'National Model Energy Code' requirements from NRC (National Research Council) names NRCAN's [HOT2000](#) as the reference software model.

<http://www.nrc-cnrc.gc.ca/eng/ibp/irc/codes/97-energy-code.html>

[HOT2000](#) is a valuable software tool for renovators, constructors, sales and marketing, architects and engineers and being free makes it even more attractive. The [HOT2000](#) download is available at the following link although one must belong to an NRCan authorized service organization to be able to print and distribute EnerGuide labels derived by using the program.

http://canmetenergy-canmetenergie.nrcan-rncan.gc.ca/eng/software_tools.html

The presentation will touch on preparing your own wall inputs, wall geometry and other relevant parameters (e.g. air leakage) of any given house. Using those inputs, [HOT2000](#) predicts the energy performance of that house which is especially useful for comparisons of different systems to optimize performance.

Bio: Randall Kiez is the proprietor of Atlas EnviroTech Inc., a Calgary based company. The company is involved in the ecoEnergy program, Alberta BuiltGreen program, infrared thermography, blower door testing and whatever else pays the bills. After modeling and blower door testing hundreds of existing and new houses a few things are certain - every house is different, all houses leak and an infrared camera without a blower door test is like bread without the butter and jam.

Attendance at March talk by Trevor Sziva, bar sponsor ARCA, was 50

Alberta Roofing Contractors' Association + New Warranty Program

Presenter: Trevor Sziva, RRO, Marketing Director, ARCA

Topic:

The ARCA was established in 1961 and is widely recognized for developing accepted application standards for a variety of roof systems installed in Alberta. ARCA contractor members account for 70% of all commercial roofing projects in the province and meet stringent qualifications required by industry with respect to safety and experience. Many Architects and Consultants refer to ARCA standards in their specifications as a benchmark of quality.

Established roofing application standards (including metal flashings) are supported by an all-inclusive roof system warranty covering workmanship for periods of 5, 10 or 15 years. Workmanship or product related issues that may arise over the warranty period are corrected at no extra cost to the owner. Also vital to the warranty program is the requirement for independent roof inspections conducted by ARCA approved inspectors on behalf of their client, the owner.

Trevor's presentation will include:

- ARCA's history and an overview of our role and involvement in the industry.
- Criteria and procedures to approve roofing systems and products
- Criteria and procedures to qualify roofing contractors and roof inspectors
- New extended warranty program in support of established application standards and approved systems.

Bio: Trevor Sziva has 25 years of experience in the Alberta roofing industry and has recently joined the ARCA administration team as Marketing Director. Prior to joining the ARCA, Trevor was an independent, ARCA Approved, Roof Inspector in Calgary and before that a technical representative for a major roof membrane manufacturer offering product application training and technical services to architects, engineers, specification writers, roof consultants, and contractors.

Attendance at February talk by Gene LaVallee, bar sponsor Dryvit (Darrin Grace, new rep) was 44

Attendance at March 11 Joint GAMA/ABEC/Spec Writers talk by Rick Wright of Oldcastle Glass was in excess of 75

Number 163 ABEC South - 4th Wednesday Luncheon Talk 10-02-24
Insulated Wall Claddings for Sustainable and Energy Efficient Designs

Presenter: Eugene (Gene) LaVallee, Dryvit Systems Canada (very recently retired); still ABEC South treasurer

Topic: This is AAA-accredited core competency course DRY-IWC, which has been assigned 1 Learning Unit credit. Learning Objectives: 1) Recognize the correlation between sustainable/green design practices and insulated building envelope performance; 2) Identify the key fundamentals of Exterior Insulated Finish Systems (EIFS) including general system components and curb design flexibility.

Bio: Gene will be giving us the best of two worlds: specific knowledge gained during his years with Dryvit Systems, plus the experience of his entire career, based on astute observation and analysis of the successes and failures of methods and materials as applied in building envelopes.

2010 ABEC memberships and renewals are due. 2009 memberships provide a grace period for January and February meetings only. Please fill out the Membership Form (downloadable from www.ABECSouth.org) and mail in with your payment.

Number 162 ABEC South - 4th Wednesday Luncheon Talk 10-01-27
Insulated Metal Panels and other Exterior Wall Assemblies Compared

Presenter: Cathal D'Arcy, Business Development Mgr (Western Canada), Kingspan Insulated Panels

Topic: The presentation will outline typical measures of performance for Insulated Metal Panels, with comparisons to other wall assemblies, based on a report authored by the Building Science Corporation (Boston, MA). if you wish to come prepared for serious give-and-take with Cathal, a 24-page summary of the findings can be viewed and downloaded [here](#) . A shorter brochure on Insulated Metal Panels is available [here](#).

Number 161 ABEC South - BOW Site Tour November 19, 2009
Possibly the last chance for a guided tour of the BOW site!

Presenter: Speakers associated with the construction of ENCANAs BOW Centre

Topic: There will be no regular 4th Wednesday luncheon meeting. Instead, up to 50 lucky applicants will be lunching at the Commerce Club and listening to a few short introductions to various phases of the work, before joining one of the guided tours of the Bow site. ABEC South is indeed fortunate in having just squeaked in before the termination of such site visits by organized groups. At last count, there are still about a dozen positions left, so if you are interested, contact Andrew Ross immediately.

This newsletter is a week early because the tour is on **Thursday, November 19th**

NB: To recap what was reported in last month's newsletter, here are your instructions for joining the tour:

1. Must be ABEC members, up to 2 per office.
2. Come with safety boots and glasses, hard hat, and "orange" vest.
3. Arrive at 11:30 at the Commerce Club, 100 6th Ave. SW for a buffet lunch starting at 12:00, \$55.00. Site rules prevent serving of liquor.
4. The short overviews will cover basement and curtain wall strategies and the safety perimeter wall.
5. Tours (of 10-12) will start at 12:45 and at 10 minute intervals thereafter.

Number 160

ABEC South Luncheon Meeting

October 28, 2009

Remediation of Buildings formerly used for illegal drug operations

Presenter: Professor Tang Lee, Faculty of Environmental Design, The University of Calgary

Topic: Former illegal drug operations, such as marijuana grow-ops and methadone labs can cause extensive damage to houses and compromise the health and safety of occupants. Inconsistent approach to remediation of these properties within the province and across Canada has resulted in ineffective remediation or costly over-remediation. This presentation outlines some of the damages to homes and the required effort to bring them back to health and safety standards.

Bio: Tang Lee teaches building science, indoor air quality, sustainable design, mechanical and civil engineering at several universities in Canada and abroad. He is on several committees of Health Canada, National Research Council of Canada, Canadian Standards Association, CCMC, and helped upgrade the training manual for building codes officers. He was recently appointed to the associate committee of the National Building Code, part 5 - Environmental Separation. He conducts indoor air quality investigations and qualified as an expert witness in civil and criminal cases.

In 1984, Tang helped form ABEC.

The AGM: The 2009/2010 executive includes one replacement; Andrew Ross will take over Aaron Skeates's duties, and will serve with Darrin Newnham and Kris Wall on an expanded committee for arranging the monthly programs. A sudden illness deprived us of the promised talk on Insulated Metal Panels at the AGM. We hope to reschedule, and wish Kathal D'Arcy of Enercorp a speedy recovery.

Number 159

ABEC South Annual General Meeting NOTICE

09-09-23

AGM (short and sweet) followed by a presentation

Presenter: **Kathol Darcy**, Enercorp

Topic: **Insulated Metal Panels** : details will appear in September 23, 2009 Newsletter

Bio: will appear in September 23, 2009 Newsletter (actual Newsletter lost. Sorry!)

Number 158 **ABEC South Annual General Meeting NOTICE** **August, 2009**
AGM (short and sweet) followed by a presentation

Presenter: **Kathol Darcy**, Enercorp

Topic: **Insulated Metal Panels** : details will appear in September 23, 2009 Newsletter

Bio: will appear in September 23, 2009 Newsletter

The AGM: The incumbents are seeking re-election to their current positions on the executive, but are prepared to be challenged by nominees from the membership (President and Past President excepted).

Number 157 **ABEC South Luncheon Meeting** **09-05-27**
Sustainable Roofing and Reflectivity

Presenter: **Stephen Teal**, Flynn Canada Ltd.

Topic: Stephen will be presenting a modified version of a presentation given earlier at McMaster University and Roof Tech in Toronto. He will cover the following three areas:

1. Three obstacles to Sustainable Roofing
2. Two easy ways to improve the performance/life expectancy of a roof:
 1. Increase thermal performance by 15 percent, and
 2. Increase life expectancy by 25 percent for no more than 6 or 7 percent higher initial cost
3. Why reflectivity may not be the answer

Number 156 **ABEC South Luncheon Meeting** **April 22, 2009**
WARRANTY INSURANCE now mandatory in BC - will AB follow suit?

Presenter: Art Doyle, National Home Warranty Group Inc.

Topic: Attending with me will be David McBeath and John Martin, David heads up the risk assessment and multi family inspection department of National and John is the Vice President of Business Development. We understand that the Alberta Government may be moving towards mandatory warranty insurance on new construction and building envelope repair sometime in the future. Our talk will focus on the effect similar legislation had on the construction industry in BC. We propose to tackle the following points:

1. An overview of building envelope repair warranty insurance in BC and the current legislation affecting both new home construction and building envelope repair.
2. How National Home Warranty assesses the insurance risk associated with exterior wall design and repair proposals
3. Within the BC legislation, the emphasis on maintenance programs which require the owners to maintain their buildings and to mitigate damage.

Number 155

ABEC South Luncheon Meeting

09-03-25

DON'T BE SUED: Strategic planning for avoiding liability.

Presenter: Stephen Carter-Edwards, Gowling Lafleur Henderson

Topic:

Having been sued, what you ought to have done in order to avoid being found liable, i.e. strategic planning for the forewarned to avoid liability

Backwards looking, if you are sued, what could you have done (oops, too late!)

Forwards looking, be prepared in advance of being sued

How to plan or have a strategy in place to deal with situation of allegations made against performance or products that you have supplied

How to avoid being found liable for:

- Own work
- Products
- Others under your retainer

Number 154

ABEC South Luncheon Meeting

09-02-25

Architectural Copper - design and specification

Presenter: Anne Schade, Revere Copper Products Inc.

Topic: How is Architectural sheet copper used? Why specify copper? What about environmental issues? These are questions Anne plans to answer before getting into the details of how to specify copper for uses new and old. You will learn about seams and pan styles, temper, weight, the importance of allowing for expansion, durability and weathering issues. ASTM standards will be discussed, as well as issues associated with whether or not to use lead coating. Questions will be welcomed, both during and after the presentation, and other information sources will be provided as required.

Number 153

ABEC South Luncheon Meeting

09-01-28

Evolution of Drywall: The Emergence of Paperless Wallboard Technology

Presenter: **Chris Davidson**, Enercorp

Topic: Drywall has been used in both interior and exterior applications for decades. It is a low cost material that offers fire resistance and ease of installation and finishing. Despite its benefits, it has two innate weaknesses: its facers will delaminate from the gypsum core when exposed to sufficient levels of moisture and it will support mould growth under the right conditions. The development of paperless wallboard technology offers the design and construction community a viable choice when contact with moisture during the construction process and after project completion is possible. This session will focus on how proper application of this technology can greatly limit an architectural firm's liability, compress construction schedules, reduce costly remediation, and help build a more sustainable building.

Number 152

ABEC South Luncheon Meeting

November 26, 2008

Curtain wall .. from stick to unitized

Presenter: **Steve Gusterson**, Alumicor Limited, Ontario

Topic: Steve's talk covers a general history of curtain wall and then moves into descriptions of the different types of curtain wall design, concentrating on unitized curtain where he believes the industry is heading. There will also be a fair bit of time spent on design recommendations what designers and architects should know at the design stage if they're considering incorporating unitized curtain wall into their project.

Number 151

ABEC South Luncheon Meeting

October 22, 2008

Foam Insulation and Waterproofing Membranes

Presenter: **Gerhard Bender**, ZeroDraft (Calgary)

Topic: You can never know too much about the application of foam insulation and waterproofing membranes. Gerhard will share his experience with practical details, such as temperature limits, overlays, and proper choices of semi- or impermeable materials. He will draw on case studies involving different spray-applied systems, and welcomes questions or comments.

Number 150

ABEC South Events for September

September 24, 2008

The Annual General Meeting + Bragging Session

Presenter: **Kris Wall**, Past President of ABEC

Topic: Kris will present a provisional slate for the 2008-2009 ABEC executive, and will be happy to haul in a few nominations before the AGM on September 24th to provide some options. In addition, he'll make the ritual three calls for nominations at the meeting, so if you like a bit of excitement, step right up and count yourselves in! As for the Bragging, once the AGM business is done, we'll have time to listen skeptically to a few 5-10 minute claims for marvelous work accomplished in the building envelope field. If you have such an item to present, please reserve your slot by contacting [Darrin Newnham](mailto:Darrin.Newnham@abec.ca) (510-1584) or [Aaron Skeates](mailto:Aaron.Skeates@abec.ca) (255-7946)

QUICK QUESTION: Would you be interested in participating in a 1-day training seminar on practical applications of 1D hygro, a hygrothermal simulation tool for tracking and predicting the movement through, and build-up of heat and moisture in, building envelopes? If yes, please e-mail me with your comments; given sufficient encouragement, we'll see what can be done and when.
alandalg@shaw.ca

Number 149 **ABEC South Events for September** **08-8-26**
The Annual General Meeting + Bragging Session

Presenter: **Kris Wall**, Past President of ABEC

Topic: Kris will present a provisional slate for the 2008-2009 ABEC executive, and will be happy to haul in a few nominations before the AGM on September 24th to provide some options. In addition, he'll make the ritual three calls for nominations at the meeting, so if you like a bit of excitement, step right up and count yourselves in! As for the Bragging, once the AGM business is done, we'll have time to listen skeptically to a few 5-10 minute claims for marvelous work accomplished in the building envelope field. If you have such an item to present, please reserve your slot by contacting [Darrin Newnham](mailto:Darrin.Newnham@abec.org) (510-1584) or [Aaron Skeates](mailto:Aaron.Skeates@abec.org) (255-7946)

This is an extra Newsletter; you'll get the usual reminder to pre-register around September 17th.

The Slate so far:

Past Pres: Bob Passmore	President: Dennis Looten	Secretary: Randy Smith	Treasurer: Gene LaVallee
Programs: Darrin Newnham	Reg/Facil: Aaron Skeates	Members: John Vlooswyk	Educ/Sem: Jim Posey
NBC Rep: Anton Vlooswyk	At Large: Tom Knott	At Large: Mike Dietrich	At Large: Kris Wall
Website/News: Alan Dalgliesh			

Number 148 **ABEC South Luncheon Meeting** **May 28, 2008**
The Role of Aerogels in Glazing Technology

Presenter: **Mark Johnson**, Sales Manager, Nanogel Construction segment, Cabot Corporation

Topic: This one-hour "lunch and learn" session will acquaint designers with those characteristics of aerogels that offer improved control of lighting and energy transmission in glazing applications. Mark's description of typical improvements in economy and sustainability will include guidelines for the most effective contribution to greater reliance on daylighting and reduction of energy costs.

This talk offers 1 CLU in the AIA/CES Registered Provider Program.

Number 147 **ABEC South Luncheon Meeting** **April 23, 2008**
Building Envelope benefits and Issues with a Panelized EIFS System

Presenter: [Randy Smith](#), A.D. Williams Engineering Inc.

Topic: The presentation will describe the design and installation of the Panelized EIFS system used in the Stella, Nova and Luna Condominiums, Calgary. The presentation will focus on the system performance, testing, building envelope detailing and the construction challenges realized with this type of system.

Number 146 **ABEC South, GAMA and CSC Dinner Meeting** **08-03-11**

Glass Strength and Service Life

Presenter: [Alan Dalglish](#), Consultant on wind engineering, glass strength, and cladding durability

Topic: Canadian standard CGSB (12.20) requires that glass resist loads of one minute duration to account for weakening by repeated exposure to gusts close to the 3-second design pressure of the National Building Code (NBC). If new glass experiences a one- or two-hour storm containing the 3-second design gust, the implied loss of strength from that single storm is about 20%. On average, glass surfaces are assumed to lose about 25% of their strength as a result of in-service exposure to tensile stress in the presence of moisture, [and/or other changes in the random population of surface flaws](#); the allowed capacity for strength design is adjusted accordingly.

Aging glass is increasingly at greater risk of failure than new glass, but the glass standard doesn't state what its service life should be. Should we be concerned? We [will](#) discuss the uncertainties that make the choice of service life difficult, but at present it must remain a judgment call by the designer.

Number 145 **ABEC South Luncheon Meeting** **08-02-27**

EIFS Research in Canada and the US - What the industry has been doing when nobody was looking

Presenter: [John Edgar](#), Senior Technical Service Manager for Sto Corp., based in Atlanta, GA

Topic: The title will have to do as the topic description, but based on past performance, his presentation should be at once entertaining, informative, and challenging - and fear not, John loves a challenge, so let the comments and questions flow.

Number 144 **ABEC South Luncheon Meeting** **08-01-23**

Air Barrier Systems incorporating spray polyurethane foam

Presenter: [Vaughn Ford](#), Technical marketing agent, BASF Canada

Topic: The spf product to be discussed has the interesting distinction of being the key component of the only wall design in Canada tested and approved by NRC/CCMC (so far) as an insulation, air barrier (material) and air barrier system. As exterior insulation, the approval for high-rise buildings is based on rigorous tests of complete walls with concrete, wood, or exterior drywall substrates. The product is currently being used in Canada for residential, industrial, and commercial applications. Vaughn will discuss technical new CCMC and CAN/ULC test for building envelopes and insulation. He notes that his one-hour presentation includes several videos, and that

: Attendance at this seminar qualifies for one hour of Core Learning Units by the Alberta Association of Architects

Number 143

ABEC South Luncheon Meeting

November 28, 2007

Structural Insulated Panels (SIP or SIPs)

Presenter: Terry Moser, VP and Director of Greensmart Manufacturing Ltd.

Topic: The presentation will cover such technical aspects of SIP panels as thermal performance, vapour and air resistance, treatment options for protection against insects, connection details, and integration with exterior cladding. Code acceptance and certification will be discussed (CCMC, ULC, etc.). The company provides start to finish help in applying SIPs in a wide range of applications: above and below grade, warm and cold climates, modular housing and hotels, and LEEDs rated construction projects. Terry has been warned to expect, and is prepared to deal with tough questions, and to describe problems encountered, as well as the merits of SIP panels.

Number 142

ABEC South Luncheon Meeting

October 24, 2007

The Road to Canadian Construction Materials Centre (CCMC) Compliance

Presenter: Peter Culyer, manager of Technical Services, Dryvit Systems Canada

Topic: The presentation will look at some of the larger questions explored and answered during the CCMC, EIFS manufacturers consortium research initiative for the development of the CCMC technical Guide for EIFS over wood substrates. A research program spanning 6 years with leading wood behaviours expert Don Onysko and Forintek labs, along with long established EIFS evaluation specialist Elie Alkhoury, M.Eng of Can-Best Laboratories.

Here's a re-cap of the results of the AGM on September 26th

President	Bob Passmore, BS+A	Treasurer	Gene Lavallee, Dryvit	Secretary	Brian Wallace, Stantec
Programs	Darrin Newnham, Ledcor	Memberships	John Vlooswyk, BEE	Registrations	Dennis Looten, Asset Cons&I
Education	Jim Posey, Constr. Spec.	Newsletter	Alan Dalglish, NRC, ret.	at Large	Mike Dietrich, MH
at Large	Aaron Skeates, Halsall Associates Ltd	NBEC representative	Anton Vlooswyk, BEE	at Large	Don Fraser, StoCorp Canada

Number 141

ABEC South Luncheon Meeting

September 26, 2007

ANNUAL GENERAL MEETING + Time to Brag and Nag

Presenter: Kris Wall, our durable Past President from RJC.

Looking Ahead: That's what we hope that the bragging and nagging will be all about. As you will remember, 2007 started with the wonderful experience of hosting the 11th CBSTC. ...

It's a hard act to follow. Now we need your help to set the path for 2008. Bragging is always fun, but constructive Nagging can be even more helpful. Give us your take on any burning issues that we might address (houses with combustible siding and crowding at the lot line, anyone?) . Again, just contact Darrin Newnham, Kris Wall, or indeed any exec member if you want to reserve a slot in the program for scripted bragging, with or without slides, nagging, or anything in between.

Number 140

ABEC South Luncheon Meeting

May 23, 2007

How building envelope failures may impact Arch/Eng insurance coverage/rates

Presenter: [Lawrence Bicknell, Senior Vice President Jardine Lloyd Thompson Canada.](#)

Topic: Lawrence heads up the professional division in JLT's Vancouver Office specializing in Architects and Engineers professional liability insurance. He will recount, from the BC perspective, how the failure of so many envelope systems nearly made BC uninsurable. The insurance market's initial reaction was basically to remove cover for water ingress. He will open a discussion on how this approach has changed with the development of warranty programs and the use of envelope consultants.

March and April meetings displaced by 11th CBSTC

Number 139

ABEC South Luncheon Meeting

February 28, 2007

walkable roof deck membranes and roofing systems

Presenter: [John Ogilvie, President, Duradek Canada Ltd.](#)

Topic: This "Lunch and Learn" presentation comes with 1.5 CE credits from AAA. It includes a discussion of the key principles of deck design, design considerations, and how to install and specify roof deck membrane systems, and is intended to give participants a better understanding of:

1. *Types of walkable roof decks, various waterproofing options, and their common problems.*
2. *The characteristics, advantages, and applications of walkable roof decks and outdoor flooring systems.*
3. *Important design concepts and considerations for walkable roof decks, balconies and walkways.*
4. *Walkable roof deck and outdoor flooring system common details and installation considerations*
5. *Key specification issues related to roof deck membranes.*

Number 138

ABEC South Luncheon Meeting

January 24 2007

Exterior Envelope Details for Single Family Dwellings

Presenter: [Marco Civitarese, Development & Building Approvals, The City of Calgary](#)

Topic: [With recent climatic effects, changes to materials and installations, and concerns with envelope detailing, the City of Calgary is adjusting its application requirements. A partnership with stakeholders allowed the application changes, anticipating that education and awareness will direct field operations to better construction techniques. Ultimately, building code compliance is the focus and field audits related to the exterior envelope will continue through 2007. The City of Calgary will be updating its requirements for exterior envelope details. Join us for an informative session on how climate has shifted the focus in this area, what the changes to the requirements will be, and how The City and industry is responding.](#)

Number 137

**ABEC South on 11th Canadian Building
Science & Technology Conference progress**

**Winter Solstice
update: December
22 2006**

To save \$100, please register before Jan 31, but why wait? The best rooms may go first

Technical Chair Richard Fairhead's Report: [download preliminary brochure: 11th CBSTC](#)

Most authors have received first review comments, and final papers are starting to come in. Where second reviews are needed, we hope to get them back to authors in January, giving them a few more weeks to tweak their papers into final versions to print (in glorious colour) and burn (CD's, that is).

Two luncheon talks will complement the technical papers as follows: 1) An insider's perspective on the teaching of building science in Canadian institutions, and 2) A tale of the unusual structural and building envelope challenges for designers of a new translucent cast glass and marble temple in South America.

Number 136 **ABEC South Luncheon Meeting** **Nov 29, 2006**

Thirty-three years in the envelope

Presenter: [Don Skinner](#) - ABEC founding member, 1982

Topic: Major projects and changing technology over 33 years .

Number 135 **ABEC South Luncheon Meeting** **Oct 25, 2006**

Predicting Wall Moisture: How Wet, How Long?

Presenter: [Alan Dalglish](#) - Former Senior Research Officer, IRC/NRCC

Topic: If walls with problems could talk, they would likely complain to a building envelope specialist (B.E.S.) about being too wet for too long. An experienced B.E.S. can predict wall performance in a qualitative sense, but numbers are harder to come by. Computer models of wall systems to improve predictions, offered in "easy-to-use", one-dimensional versions for use by a B.E.S., have received mixed responses. Predictably for a former researcher, the presenter is a booster of modeling, and has a few words of encouragement for those yet to be convinced.

Number 134 **ABEC South Annual General Meeting** **Sep 27, 2006**

Looking ahead to 2007

Presenter: [Richard Fairhead](#) - Past President 2005-2006, ABEC South

Directors' reports, proposed slate for 2006-2007: The traditional brisk run-through of financial affairs will be followed by progress reports on various aspects of the **11th Canadian Building Science and Technology Conference (CBSTC)**. We already have one welcome volunteer for the board; unless more come forward before next Wednesday, here's the slate to be proposed for your voting pleasure (so far no seats contested), with **Past President** being [Kris Wall](#), **RJC:**

President	Bob Passmore, BS+A	Treasurer	Gene Lavallee, Dryvit	Secretary	Brian Wallace, Stantec
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Programs	Darrin Newnham, Ledcor	Memberships	John Vlooswyk, BEE	Registrations	Dennis Looten, Asset Cons&I
Education	Jim Posey, Constr. Spec.	Newsletter	Alan Dalglish, NRC, ret.	CBSTC	Mike Dietrich, MH
CBSTC	Richard Fairhead, BS+A	CBSTC	Anton Vlooswyk, BEE	CBSTC	Randy Smith, ADWE

Number 133

Sep 27, 2006

Directors' Reports, Nominations, Elections

Presenter: Richard Fairhead - Past President, ABEC South

Directors' Reports: The traditional brisk run-through of financial affairs will be followed by progress reports on various aspects of the

11th Canadian Building Science and Technology Conference, March 22-23, 2007, which will be hosted by ABEC South at the Banff Centre.

Nominations and elections: Nominations will be gladly fielded by Richard Fairhead at any time between now and the AGM, so if this is your year to volunteer, give it your best swing! Of course, you could also let the suspense build up and wait for the triple call at the meeting: "Any nominations? Any nominations? Any nominations?" We do ask that you clear any nominations with the nominee before making them.

- The Annual Golf Tournament was a big success, despite competition from CSCE's event at Lynx Ridge on our preferred 4th Wednesday. Please check out the sponsors [here](#) - thanks for adding to the fun

52 @ May meeting

bar sponsor: Gene Lavallee, Dryvit Systems Canada

Number 132

May 24, 2006

Trials and Tribulations of Detailing EIFS in 3D

Presenter: Kevin Day - Halsall Associates Ltd. - Engineers & Consultants (Toronto)

Topic: In the realm of design, having sufficient details for construction of buildings is often an issue. In fact, many performance problems can be attributed to insufficient details. A challenge for many designers is the detailing of building envelope systems, such as EIFS. This presentation will provide examples of 3-dimensional, fully rendered details for building envelopes clad with EIFS, utilizing the principles derived from the CMHC EIFS Best Practice Guide.

60 @ April meeting

bar sponsor: Dave Lawrence, Can-Cell Industries Inc.

Number 131

April 26, 2006

Dispelling the Myths about Housewraps

Presenter: Mary Greenlees - Regional Sales Manager, BBA Fiberweb -manufacturers of Typar Housewrap and Flashings.

Topic: Mary will be presenting the latest developments in the Housewrap industry. She will address the following questions: Are all weather resistant membranes (WRM's) created equal? How are WRM's tested and what are the results? How do issues such as Air Barriers, Optimum Moisture Vapor Transference, Surfactants, affect the decision on what membrane is best for an application?

32 @ March meeting bar sponsor: John Riley, Intercoast Distributors

Green Roofs --- an Ecologist's Perspective

Presenter: Dr. David G. Walker, principal of David Walker and Associates Ltd. of Calgary and an Adjunct Associate Professor at the University of Calgary in the Faculty of Environmental Design.

Topic: The ideal green roof would be self-sustaining, with minimum-to-nil maintenance, and require no inputs other than those provided by the site microclimate. It would not grow beyond bounds and become a nuisance, nor would it die off or become weedy. It would, in short, be an ecosystem --- a stable community of plants (and other organisms) in equilibrium with the environment and having the ability to recover from ordinary disturbances or variation in circumstance.

Does such a roof exist? It is difficult to restore ecosystems after unusual disturbances under any circumstance --- to do the equivalent on a roof, where the microclimate is extreme, and the soil is shallow and artificial, is not a trivial undertaking.

Dr. Walker has been observing green roofs with interest for some 20 years, and will share some of the pictures, observations, and anecdotes he has gathered over that time, showing what can go right, what can go wrong, and some pointers on what he thinks is needed to make a roof vegetate successfully.

He has followed the efforts of various green roof manufacturers and researchers, but has placed no bets on which of the current contenders for an integrated green roof system will succeed.

Bio: Dr. Walker is a consultant, researcher, and instructor specializing in revegetation and erosion control. His professional associations include CPESC, Certified Professional in Erosion and Sediment Control; P.Ag., Professional Agrologist; P.Biol., Professional Biologist; and CPRM, Certified Professional in Rangeland Management. David has over 25 years of experience in the field of land reclamation in western and northern Canada and parts of northwestern USA. He has consulted to all levels of government, national and provincial parks, oil and gas industry, electrical power industry, ski industry, and non-governmental organizations. David has over 30 years teaching experience at the university level and at the technical level in professional development courses.

35 Attendees @ February meeting

bar sponsor: Soprema

Number 129

February 22, 2006

Environmentally-friendly rooftop vegetation - An update on the concept

Presenter: Trevor Sziva, Soprema Technical Representative

Topic: Three years ago, Trevor explained the SOPRANATURE concept for enhancing roofs and terraces with vegetation while waterproofing them. Local installations of "Green Roofs" were presented, along with information on the research and climatic experimentation on which this environmentally-friendly system is based.

Trevor has kindly agreed to give us an update on further developments and benefits achieved. We appreciate his help (on short notice) to solve a scheduling problem with the topic previously announced. Looking on the bright side, revisiting Green Roofs now will allow us to better weigh the benefits of actual installations, when we hear next month's presentation on an Ecologist's Perspective on Green Roofs.

Bio: Started career with Soprema in 1985. Began overseeing such projects as waterproofing on the "The Head Smashed-In Buffalo Jump", roofing application on West Edmonton Mall roller-coaster roof and waterpark roof. Last year, Trevor completed "Green Roof 101", a basic understanding of green roof technology, and will be taking 201, Implementation of a green roof installation, in Boston this coming May.

72 Attendees @ January meeting

bar sponsor: Keith Pynoo, Kawneer

Number 128

January 25, 2006

Edmonton's Muttart Conservatory - Retrofitting the glass pyramids

Presenters: Paul Heyens, Manager and President, Alberta Glass Company Inc.

Topic: The Muttart Conservatory was built in the seventies and was designed as single glazed greenhouses with

little consideration for energy efficiency. It has become a landmark of the Edmonton River valley and the 4 main pyramids are filled with exotic flora, fauna, birds and butterflies. It is a favorite location for school field trips, outings and special functions.

The City of Edmonton decided to refurbish the pyramids with modern materials and glazing to increase energy efficiency, public safety and maintenance costs. The Muttart Society wanted to preserve the historical look of the pyramids, while keeping the facility open to the public throughout the project. Alberta Glass was the Glazing contractor for this retrofit, using a Kawneer 2000 skylight system and hi-performance sealed units. This presentation will address the unique challenges of this project including access scaffold, logistics and public safety.

Bio: Paul Heyens is a member of ABEC, GAMA, CCA, ACA and Merit Contractors Association. Alberta Glass has twice been voted employer of excellence with Merit Contractors Association and has been nominated for the 2005 Employer of the year by Alberta Apprenticeship.

Paul is a Journeyman Glazier with 30 years of experience in the trade. He is a former Presiding Officer for the Provincial Apprenticeship Committee in Alberta and was the inaugural president of the Provincial Glaziers Association of Alberta. He serves as Chairman of an independent School Board and sits on other business Boards. He has worked with a number of ABEC South members on various retrofit and new construction projects.

62 Attendees @ November meeting

bar sponsor: ABEC South

Number 127

November 23, 2005

Failures from a range of rare to really common causes

Presenters: Kevin Brown, President of Gravity Engineering Incorporated

Topic: Unique features of several building envelope failures due to vapour diffusion (rare), air leakage (common), and rain water penetration (really common) will be highlighted. In addition, a classic example of mould growth due solely to the interior environment will be discussed (ie. poor ventilation with no contribution due to rain water penetration or air leakage).

Bio: Mr. Brown's 24 years of experience in the consulting industry (21 as a Professional Structural Engineer) include design or repair of more than 150 commercial, industrial, and residential buildings. Kevin's Pre-Purchase Due Diligence Assessments for more than 350 buildings (12 million square feet) cover commercial retail shopping centres; high-rise and/or low-rise office facilities; warehouse/office facilities; and, high-rise and/or low-rise apartments or condominiums.

Gravity Engineering Incorporated (1997 to present) specializes in the investigation, assessment, reporting and remedial repair of designs as required for performance related issues with buildings. In-house expertise focuses on the application of Structural Engineering and Building Envelope Sciences experience, with Project Management of specialized sub consultants augmenting the investigation or assessment as required. Gravity Engineering provides Engineering Advisory Services to Adjusters, Insurance Companies, Building Owners and Property Managers.

62 Attendees @ October meeting

bar sponsor: Craig Broder, IMASCO

Number 126

October 26, 2005

Stucco Resource Guide and Stucco Tool Kit - aids to better workmanship

Presenters: Dr. Stan Hall, AWCA Technical Committee; Ms. Joan Maisoneuve, Alberta Housing Industry Technical Committee and Ingo Viehweger, Alberta New Home Warranty Program.

Topic: The Alberta Wall & Ceiling Association, along with their partners from The Alberta New Home Warranty Program and Alberta Housing Industry Technical Committee, addresses workmanship through a Stucco

Resource Guide that deals with better building practices and a Stucco Tool Kit aimed at the residential industry. We are well aware of the difficulties of maintaining acceptable construction quality when so many contractors are competing for experienced trades-people, or failing that, are looking for ways to bring new workers up to speed quickly. We welcome this update from Dr. Hall and his fellow members of AWCA's Technical Committee, on their plans for dealing with this issue.

~25 Attendees @ September meeting bar sponsor: Building Science + Architecture

Number 125

Annual General Meeting

September 28, 2005

Presenter: Richard Fairhead, Past President.

Topic: Richard is looking for new nominees for possible election to the ABEC South executive, so far without success. Those currently on the executive have agreed to run for the positions that they occupy now: **President**, Kris Wall; **Secretary**, Randy Smith; **Treasurer**, Darrin Newnham; **Memberships**, John Vlooswyk; **Programs**, Bob Passmore; **Registrations**, Dennis Looten; **Conference '07**, Mike Dietrich; **Conference/NBEC**, Anton Vlooswyk; **Education/Seminars**, Jim Posey; **Director at Large**, Gene LaVallee; **Newsletter**, Alan Dalgliesh. That's an increase of two members from a year ago, with some reassignments, to prepare for ABEC South's role as host of the 11th Canadian Building Science and Technology Conference, to be held at the Banff Centre in March, 2007.

Most of ABEC South's executive were among the 375 people in attendance at the 10th Conference in Ottawa May 12-13. Mike Dietrich made a short presentation on Friday, inviting everyone to mark their calendars, and plan to attend the 11th Conference in Banff on March 22 & 23, 2007, hosted by ABEC South.

Anyone interested in contesting any of the 11 positions should contact Richard ASAP; there will also be the usual triple request for nominations from the floor at the AGM. In addition, Mike (or his successor) will be looking for support, as will other directors directly involved in planning for the Conference.

ABEC South's Targets: Conference planning will be front and centre for the next 18 months, but ABEC's own show must go on as well. As you will see from our [brochure](#), we lay claim to many interests and activities, but to be effective, we need specific targets, for example;

performance of building envelopes, yes, but what aspects of performance should our monthly presentations address? After a record-breaking rainy season, hundreds of Calgary home-owners with leaking windows, walls, roofs and basements want help. Commercial and residential construction projects need input from building science practitioners on a wide range of issues, but leak prevention ranks high on that list as well. So which squeaky wheel should be greased first? What other wheels do you perceive?

Instead of a bragging session as in past AGMs, this AGM will be thrown open to suggestions and discussion of the worthiest targets for ABEC South to pursue at this busy and challenging stage of our existence.

25 Attendees @ May meeting

bar sponsor: Zerodraft

Number 124

CTA's Spring Gardens Bus Barns Renovation

May 25, 2005

Presenter: Gerhard will start off by describing extensive building envelope rehabilitation required by the Spring Gardens bus barns and administration building. Zerodraft had several issues to deal with, including many drafty doors, and sealing of a cinder block wall to prevent bus exhaust from entering offices that are attached to the barns. The administration building's envelope was completely overhauled. Grant Eliuk will be on hand to present thermography results, and to answer questions. Gerhard also plans to report on similar work for the Brewster

Bus Barns in Banff.

Bio: Gerhard has been in the contracting business in and around Calgary since 1991. As a window & door installer for Sears and then Pella, he was asked to deal with building problems such as condensation, draft and general building discomfort. Research into these issues led him to a company called Canam building Envelope and Tony Woods. Recognizing the need for building remediation services in Calgary, he studied Tony's methods and installation of products.

Zerodraft Calgary was born from there. Last year Zerodraft was nominated to receive a Canadian energy award for work done on several buildings and houses.

52 Attendees @ April meeting

bar sponsor: Flynn Canada

Number 123

Architectural Metal Panels

April 27, 2005

Presenter: Stephen Teal, Flynn Canada Ltd.

Topic: Flynn Canada provide a wide range of architectural and industrial metal panels, foam, composite and solid, as well as wall and commercial low-slope roofing systems. Stephen will describe several of these products with a PowerPoint show to set the stage for a general discussion of common industry issues, the "Systems" approach to rainscreen designed panels, new products and technologies. He welcomes audience participation addressing problems that you may be currently working on. You might want to count on staying a little longer for this meeting.

Bio: 25 years of management experience in industrial/commercial roofing and siding in Ontario and Alberta have brought Stephen to the position of Partner and Technical Manager of Flynn Canada Ltd., with 15 offices nation-wide, several U.S. projects underway, and completed ones in the Caribbean. He is currently President of the Alberta Roofing Contractors Association and Member of the Roof Consultants Institute, Construction Specifications Canada, ABEC South, Green Roofs for Healthy Cities, and the Alberta Apprenticeship & Industrial Training Committee, Stephen also has awards, certificates, and service in leadership positions from his days in Ontario.

48 Attendees @ March meeting

bar sponsor: Siplast

Number 122

SBS solutions to everyday roofing problems

March 23, 2005

Presenter: Peter Hicks, Siplast Manager - Western Region North American Operations

Topic: SBS Mod Bit Technology- a quick overview will set the stage for a discussion of application methods, with emphasis on cold adhesives. Next, after touching on LEEDS opportunities in roofing, Peter will quickly review some unique solutions to everyday roofing problems. If Peter's proposed solutions raise comments and further questions, so much the better. He will do his best to respond to them as well.

Bio: Mr. Hicks has been in the building products industry for 20 years, the past 17 with Siplast. As a U.S. leader in SBS modified bitumen technology, Siplast has encouraged the use of cold adhesive applications and has developed several unique solutions to common roofing problems. Mr. Hicks has kept architects, consultants and engineers in touch with these developments throughout the western parts of the U.S. and Canada over the past 10 years.

48 Attendees @ February meeting

bar sponsor: Crystal Clear Window Works

Number 121

February 23, 2005

De-M(y/i)stifying failed Insulating Windows

Presenter: John Hennessy, President & CEO of Crystal Clear Window Works

Topic: When insulating windows go bad - who you gonna call? Not too long ago, your only option was to replace fogged-up units, not an easy exercise, especially on a high-rise. But what if you could call in a repair crew that offers to return your existing windows to clarity for half the replacement cost? Would you want to investigate that option? Is it building science, or fog and mirrors? John will answer your questions next Wednesday.

Outline:

1. Background on process, where discovered, by whom; the CCWW business model (briefly)
2. Excerpts from a technical presentation to IGMA (Insulating Glass Manufacturers Alliance)
3. The science behind Crystal Clear's process (i.e. de-mystification of de-mistification)
4. Moving forward - science meeting standards (ASTM E 997, E 1300, CGSB-12.20, CSA-A440)

Bio: John Hennessy is a career technology executive in hi-tech ventures, putting in 22 years with companies such as IBM and Siemens, then 5 years as management consultant for Accenture. John devoted his next 7 years to taking early-stage companies to international markets (e.g. Lucent's Voice-over-Internet-Protocol expertise was acquired for \$100M). While on sabbatical from the world of bits and bytes, John purchased dealership # 001 from Crystal Clear Window Works, 6 weeks later was invited to be President/CEO, and the rest is history.

John's academic preparation for all this? Honours B.Sc. in Social Science, (Recreology) so relax everybody, and get ready for a good time..

43 Attendees @ January meeting

bar sponsor: Flynn Canada

Number 120

January 26, 2005

Risk Management for Roofing

Presenter: Ken Martin, C.E.T. , Technical Officer for the Alberta Roofing Contractors Association (ARCA)

Topic: Building owners and managers need to be aware of the safety and liability issues facing the providers of roofing services, so that effective risk management is clearly understood and universally applied. ARCA has responded to the risks in many ways:

1. Multi-faceted educational and training programs for workers in the field
2. Hazard assessments
3. Introduction of new application methods
4. Partnerships with roofing membrane manufacturers

The impact on roofing of new OHS fall protection regulations, as well as building design, will be presented. Contract awards will continue to be heavily influenced by overall cost, but it is in everyone's interest to ensure that selected contractors demonstrate their expertise in managing risk, particularly in the application of some of the newer roofing membranes.

Bio: Ken Martin obtained his diploma in Structural Technology at the Manitoba Institute of Technology in 1969, and worked for the Montreal Engineering Company prior to joining ARCA in 1986. Ken oversees all aspects of the Technical Department, providing expertise and support on Alberta roofing issues, and on ARCA's Warranty

standards, Certificate of Assurance Program, and workmanship-related warranty claims. He develops safety training and risk management programs for roofing, and represents ARCA on industry/government regulatory, technical and safety committees. Ken is a member of the Canadian Roofing Contractors Association's (CRCA) national technical committee.

38 Attendees @ November meeting

bar sponsor: ABEC South

Number 119

December, 2004

**Tentative Schedule for January - May 2005 + Reminder for
10th Canadian Conference on Building Science and Technology May 12-13 in Ottawa**

For the preliminary brochure, please click here: [Promotional flyer Dec 2004.pdf](#)

This is the same Conference that ABEC South has been promoting for many moons. At the bottom of this newsletter, see the remnants of an earlier, bigger spread, with a link to more information on the conference at the NBEC website.

You can register for this conference either by filling out the form in the promotional flyer, printing it and mailing it in, or you can register on line here: <http://www.nbec.net/conference/registration.html>

The important date for saving \$75.00 is to register by January 30th.

Now, about ABEC South's **tentative** schedule below, clearly, tentative is the operative word, but we should have firmer information in time for the regular January Newsletter.

[Early membership renewals for 2005](#) are starting to pour in (**that's** never happened before!), so why not join the rush? OK, I lied, it's more of a dribble than a pour, and I forgot to give Darrin my cheque, but if I had, we would be pressing past the 4 mark by now.

38 Attendees @ November meeting

bar sponsor: ABEC South

Number 118

November 24, 2004

Health and Safety in the workplace ... Know your responsibilities!

Presenter: D.A. (Dave) Fergus, Workplace Health and Safety, Alberta Human Resources and Employment.

Topic: The presentation will introduce and review the new Occupational Health and Safety code, with particular emphasis on employer/worker responsibilities under **DUE DILIGENCE**. Now that Dave has your attention, take a quick look at his qualifications to be convinced that he is just the person to help you discharge your duties efficiently. Yes, of course your questions, suggestions, and accounts of workplace experiences are welcome!

Bio: Dave Fergus has worked 23 years with the Alberta Government, first developing courses and making presentations for Adult Education as an Education and Training Officer. For the past 15 years, Dave has been a Safety Officer helping his industry clients to meet their obligations under the Occupational Health and Safety Legislation. He holds a journeyman's ticket in industrial and commercial insulation, and has worked on and supervised many projects in Southern Alberta. His prior experience was international and diversified: England, Europe, New Zealand, and Australia, where he worked in food processing, brewing, manufacturing, maintenance in the pulp and paper industry, construction, restaurants, and even as an Air New Zealand flight attendant.

64 Attendees @ October meeting

bar sponsor: Ledcor Construction Ltd.

Number 117

October 27, 2004

Panel: Performance of Trowel-on Air Barriers in EIFS Systems

Presenters: Akrilon (Stan Hall); Dryvit (Gene LaVallee); Imasco (Denisa Ionescu); Preswitt (Tom Smith).

Topic: The focus will be on the role of trowel-on products as part of a system rather than as materials sold separately for various purposes. Each speaker will have 10 minutes to describe one or more product lines, taking care to respond to a common set of questions given to them beforehand. They will then form a panel, with Jim Posey as moderator, and all will take part in a panel discussion, this time responding to questions and comments from the audience.

24 Attendees @ September AGM

bar sponsor: none (no drinks!)

Number 117

October 27, 2004

Panel: Performance of Trowel-on Air Barriers in EIFS Systems

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24 Attendees @ September AGM

bar sponsor: none (no drinks!)

Number 116

September 22, 2004

ABEC South Annual General Meeting @ CMHC Wood Frame workshop

Presenter: Anton Vlooswyk, Past President, and Mike Dietrich, Seminar Director, ABEC South.

Topic: Anton Vlooswyk hopes to announce a few new nominees for possible election to the ABEC South executive, but so far has none. Those currently on the executive have agreed to run, with some shuffling of positions, but since the work load will increase as we start planning for ABEC to host a major building science conference in 2007, your approval will be sought to add at least one more director. Nominations can be made at the AGM, or at any time before, by contacting Anton directly (telephone 403-651-1514, or email <mailto:anton@beei.ca>).

Mike Dietrich will provide a brief account of preparations and plans so far for the **11th Canadian Conference on Building Science and Technology**, and information about the 10th Conference, May 2005 at Ottawa, appears below.

What, no Braggers this time? Traditionally, ABEC South AGM's are enlivened by 3 or 4 short but uplifting presentations on notable advances or discoveries in building materials, techniques, or investigations. This year, however, we wish to collaborate with CMHC's Anand Mishra, who has arranged for a full-day workshop based on CMHC's Best Practice Guides for wood frame design and construction. Unfortunately for us, the workshop is already over-booked, but Anand would like to hear from everyone who would be interested in registering for a second presentation of the workshop later on. You can view and download the 5-page brochure including a registration form here: [CMHC workshop on woodframe construction](#) .

Please note the change of venue for the September 22 presentation. Instead of our regular meeting place, the workshop, and our luncheon and AGM meeting, will be at:

Sheraton Cavalier, 2620 32nd Avenue NE, Calgary - 12:00 to 1:00 PM

Number 115

May 26, 2004

EnerGuide for Houses and the Federal Retrofit Incentive Program

Presenter: Heidi Boehm, ATCO EnergySense.

Topic: Heidi will provide an overview of the EnerGuide for Houses (EGH) Program and how it ties to the EGH Federal Retrofit Incentive Program. She will describe the entire process from the time of the initial booking to when money is allocated by the government. Heidi will also offer specifics on retrofit activity performed in Alberta and how it has helped the environment.

Bio: Heidi Boehm is an Energy Analyst with ATCO EnergySense where she provides customers with energy efficiency management advice. Her role also consists of the marketing and administration of Natural Resources Canada's (NRCan) EnerGuide for Houses (EGH) Program in Alberta. Prior to ATCO, she worked in Ottawa as a Program Officer for NRCan on the EGH service.

Heidi holds a Communications BA and a Business Administration Diploma specializing in Environmental Waste Management.

56 Attendees @ April luncheon

bar sponsor: Jim Warren, MH

Number 114

April 28, 2004

Impact of Thickness on Stucco Performance

Presenter: Mike Dietrich, Morrison Hershfield Ltd., Seminar Director of ABEC South.

Topic: Morrison Hershfield Limited completed a study for Alberta Housing Industry Technical Committee (AHITC) of stucco performance on residential buildings in Alberta. The focus of the study was how the thickness of the stucco influenced its performance. A summary of the results of the study will be presented.

Bio: Graduated with Masters' Degree in Civil Engineering from University of Waterloo, Mike has almost 10 years' experience in the field of building restoration, the last four years with MH. Don't forget, Mike is also Seminar Director and will be calling for volunteers to participate in the organization of the 11th Conference on Building Science and Technology, to be hosted by ABEC in 2007. His talk will give you a sample of the practice-based presentations favoured for the BS&TC.

41 Attendees @ March luncheon

bar sponsor: Glyn Jones, Golder Associates

Number 113

March 24, 2004

Strategies for Managing Mould Issues in the Built Environment

Presenter: GLYN P. JONES, M.A.Sc., P.Eng., CIH, ROH, CHMM, - Principal, Golder Associates Ltd.

Topic: Litigation and liability associated with black mould, toxic mould and others has exploded in the news and in the courts.

How do stakeholders manage this potential time bomb? The topics of discussion will include:

1. Mould: Introduction and Background
2. Microbiology of Moulds
3. Effects of Mould on Building Materials
4. Guidelines, Codes and Standards (Provincial and Federal Regulations. CSA, Health Canada, IICRC S500 Standards, NTC Guidelines, Canadian Construction Association Guidelines)
5. Prevention/Mitigation Techniques
6. Case Studies (Design, Construction, Operations and Maintenance lessons learned)

Bio: Glyn Jones is a Registered Occupational Hygienist (ROH) and a Certified Industrial Hygienist (CIH). Glyn

has been consulting for over 16 years on indoor air quality and hazardous materials (asbestos, PCBs, mould, lead, TVOCs and others). His expertise includes air sampling and analysis, indoor air quality, mould investigation and remediation, ventilation for contaminant control, program development and auditing; regulatory interpretation and compliance, exposure and risk analysis and management, as well as hazardous material handling and abatement technologies. He has lectured and taught in Canada (SAIT and Mount Royal College) and overseas (Griffith University, Brisbane, Australia).

59 Attendees @ February luncheon

bar sponsor: David Veldhoen, Unicrete

Number 112

February 25, 2004

Environmental Evaluation Systems for Buildings

Presenter: Jim Love, University of Calgary

Topic: LEED, BREEAM, and C2000 are environmental evaluation systems for commercial and institutional buildings that have been in use in Canada over the past 10 years. The features covered by each system will be discussed, as well as the relative strengths and weaknesses of the systems.

Bio: Jim Love has a BAsC (Elec. Eng.) and master's and doctoral degrees in architecture. He is Professor and Associate Dean (Research and Outreach) in the Faculty of Environmental Design and Adjunct Professor of Mechanical Engineering. He has been researching sustainable building for more than 20 years. He was principal author of the Illuminating Engineering Society of North America's 1999 Recommended Practice of Daylighting.

71+ Attendees @ January luncheon

bar sponsor: Building Envelope Engineering

Number 111 Number 110 - December 2003 was similar but without Jan mtg info. January 28, 2004
Moisture control for low buildings - putting principles into practice

Presenter: John Vlooswyk, Building Envelope Engineering

Topic: John made this presentation at the Western venues of the **Building Science Insight Seminar series 2003,**

Effective Moisture Control for Light-Frame Walls of Low-Rise Buildings. Richly illustrated with slides of problems and successes on building sites in Western Canada, this presentation is well worth a second sitting for those who attended BSI 2003, and a unique chance to sample the applied side of the Seminar for those who missed it. Come prepared to add your own insights into the cases described.

27 Attendees @ November luncheon

bar sponsor: A.D. Williams Engineering Inc

Number 109:

Wednesday, November 26, 2003

HAM - Where's the meat?

Presenter: Jim Posey - Posey Construction Specifications

Topic: An introduction to computer programs for modelling heat, air, and moisture in building envelopes: what they are, what you might be able to do with them, and why you might want to. When will **your** HAM will be ready?

Bio: Over the last 30+ years. Jim's experience has included specifications writing, construction inspections, working drawings, contract administration, failure analysis, technical writing and computer modelling.

27 attendees @ October meeting

bar sponsor: A.D. Williams

Number 108:

Wednesday, October 22, 2003

Wind and Rain gang up on Windows in a Stucco Wall

Presenter: Bob Passmore - Building Science + Architecture

Topic: Bob will describe the trial by wind and water of a set of ganged windows looking NW from the edge of a steep slope, with nothing to block the view (or the wind!). The stucco wall developed vertical cracks next to the window, and horizontal cracks at the line between sets of IG units stacked vertically. The latter probably resulted from flexing of the ganged windows under wind load because of inadequate support for the IG units along this line. Although the IG units performed well, rainwater leaked into and through the wall, and the problem persisted until proper support was provided for the ganged assembly.

Bio: Bob is a registered architect who has been working in the architectural consulting field for 19 years. He has spent the last seven years focused on building envelope issues first with Building Science Specialists and now as the principal of the newly formed firm of Building Science + Architecture.

36 attendees @ September meeting

bar sponsor: IMASCO Minerals

Number 107:

Wednesday, September 24, 2003

Annual General Meeting + bragging session

Presenters: Anton Vlooswyk, Past President (AGM) + volunteer braggers

Topics: Nominations for positions on the ABEC Executive should be made to Anton Vlooswyk [the ABEC executive](#), ahead of the meeting if possible, but they can also be made from the floor on September 24 (with the approval of the nominee).

Lorne Andrusiak	Dow
Gerhard Bender	ZeroDraft
Kevin Cooper	Elite Marketing
Kerry McLaren	Safe On Time Glass Services
Your Name Here	call Bob Passmore @ 703-7535 or mailto:bpassmore@bsaa.ca

Bragging Session - nearly ready to roll

Number 106:

August Notice for Wed, September 24, 2003

Annual General Meeting + bragging session

Presenters: Anton Vlooswyk, Past President (AGM) + volunteer braggers

Topics: Nominations for positions on the ABEC Executive should be made to Anton Vlooswyk [the ABEC executive](#), ahead of the meeting if possible, but they can also be made from the floor on September 24 (with the approval of the nominee).

As for the bragging session to follow the AGM, up to five 5-minute slots are available on a first-come basis. Contact Bob Passmore [the ABEC executive](#), who tells me that two slots are already filled. The rules prohibit heckling or unkind comments from the audience. It's a chance to highlight briefly any new developments or successes in the building envelope field, of which you are particularly proud.

32 attendees @ May meeting

bar sponsors: Building Science + Architecture & Building Science Specialists - FAIM software

Number 105:

Wednesday, May 28, 2003

Innovative Spandrel Panels

Presenters: John Reitmeier of Grant Metal Products and Gary Day of G'Day Architectural Sales

Topic: Glass Therm Panels were designed to take the place of a traditional backpan in either Storefront or Curtainwall applications. This product is installed in the same manner as a sealed unit allowing for cost savings on labour.

Bios: - John is the General Manager of Grant Metal Products where he has worked for the last 15 years starting in the shop and working himself up through this company as it has grown. Gary Day started in sales in the late 70's and was made sales manager of a welding supply company in 1981. In 1986 Gary became involved in the Glazing industry. He spent 10 years in sales with National Glass and in 1997 started his own business acting as a manufacturers representative. He currently handles products for 8 companies including Grant Metal Products.

30 attendees

bar sponsor: Grant Metals

Number 104:

Wednesday, April 23, 2003

Effective Air Barriers - a special 2-hour presentation

Presenters: Ryan and Laverne Dalgliesh, Building Professionals Consortium

Topics: 1. Separating the Requirements for Air, Vapour and Moisture Barriers - 45 minutes
2. Typical Air Barrier Materials - 15 minutes
3. Codes and Standards - 30 minutes
4. Helping the Installer Get it Right - The NABA * Quality Assurance Program - 15 minutes

• **NABA = National Air Barrier Association.**

Bios: - Ryan and Laverne form a fine family tag team of expertise and commitment when it comes to getting the message out on what it takes to make air barriers work. This will be a compact version of full-day workshops that they have presented in Manitoba. Perhaps this will be a warm-up for a 1/2-day seminar in Calgary, later on this year. Ryan was too modest to provide specific details for a bio, but you would have thought that he would pass on a few kind words about Laverne! No matter, we do know that they will expect plenty of input from their audience, so come prepared to ask the probing questions, and offer comments about your own experiences with air barriers.

64 attendees

bar sponsor: A.D. Williams

Number 103:

Wednesday, March 26, 2003

Thermal Modeling to Optimize Building Envelope Details

Presenter: Jim Posey, Posey Construction Specifications

Topic: Jim will discuss potential applications, and the limitations of finite element heat flow models applied to detailing of building envelope, with emphasis on 3-D models. He will briefly compare the modelling software he has used for this, 2D heat flow, 3D heat flow and HAM, to compare their capabilities and limitations. Heat flow models have long been used to optimize window and curtainwall sections, and can be used more generally to make thermal bridges less conductive, less vulnerable to moisture damage, or both.

Bio: - Jim Posey has been a specification writer since 1971 and has been principal of Posey Construction Specifications since 1984; writing specifications, consulting on building materials and assemblies, and doing technical writing related to building science. His experience includes architectural drafting, building science research based on field observation, hygrothermal modeling, and contract administration.

42 attendees

bar sponsor: Soprema

Number 102:

Wednesday, February 26, 2003

SOPRANATURE : A totally environmentally-friendly concept in rooftop vegetation !

Presenter: Trevor Sziva, Soprema Technical Representative

Topic: SOPREMA put years of research and climatic experimentation into developing its SOPRANATURE concept that turns roofs and terraces into lush gardens. We don't just waterproof roofs, we make them come alive with environment-enhancing vegetation.

Presentation will show installations of "Green Roofs" completed locally, as well as information about research and benefits of a "Green Roof".

Bio: - Started career with Soprema in 1985. Began overseeing such projects as waterproofing on the "The Head Smashed-In Buffalo Jump", roofing application on West Edmonton Mall roller-coaster roof and waterpark roof.

30 attendees

bar sponsor: Roofing consultants Institute, Western Canadian Chapter

Number 101:

Wednesday, January 22, 2003

EIFS developments for Moisture Protection and Quality Assurance Program

Presenter: John G. Smith, Dryvit Systems

Topic: The moisture intrusion developments in the Mid Atlantic States of the U.S. and Lower Mainland of B.C. led to the development of EIFS assemblies that provided for greater levels of redundancy in moisture protection. A review of the systems commonly being promoted within the EIFS marketplace forms the core of the discussion. An update will be given of the Industry Quality Assurance Program.

Bio: - National Sales Manager for Dryvit Systems Canada since 1977, currently the Vice President of the Eifs Council of Canada and committee chair overseeing the development and implementation of the Industry Quality Assurance Program (QAP). Previously held sales and sales management positions at W.R. Grace & Co. (12 years) and technical service and sales positions with Tremco Ltd. (8 years). Career focus: moisture protection/building envelope aspects of construction.

47 attendees

bar sponsor: Dryvit Systems

Number 100:

Thursday, November 28, 2002

**Brick Veneer/Steel Stud - (CMHC Best Practice Guide)
1/2-day presentation**

Presenter: Jim Posey, Posey Construction Specifications

Topics: Review of principles and development of typical brick veneer/steel stud building envelope details.

Participants are encouraged to bring their own details for review and discussion as well.

Bios: - Click on this link to the [Presentation brochure](#).

52 attendees

bar sponsor : IXL

Number 99:

Wednesday, October 23, 2002

**Architectural Precast Concrete (CMHC Best Practice Guide)
1/2-day presentation**

Presenters: Luis de Miguel (CMHC), Dave Scott (MH Ltd), John Fowler (Canadian Precast/Prestressed Concrete Institute).

Topics: Review of principles and development of typical precast concrete building envelope details.

Participants are encouraged to bring their own details for review and discussion as well.

Bios: - Click on this link to the [Presentation brochure](#) .

65 attendees

bar sponsor: Lafarge, CPCA Local Chapter

Number 98:

Wednesday, September 25th, 2002

Annual General Meeting + Bragging & Complaining Session

Presenter: A.G.M. - past president Randy Smith; Complaining - exec members.

Topics: Owing to a paucity of volunteer braggarts, some exec members will take it on themselves to present a few cautionary tales about construction details gone bad - rogue renovations, etc. If you feel a "brag" coming on, alert our program director Bob Passmore soonest here's his phone number: 703-7535,

fax: 686-1806, and E-mail: <mailto:bob.passmore@bssl.net> ! Bios: - N.A.

28 attendees

bar sponsor: ABEC South

Did any of you catch Jim Posey's presentation at the CSC Conference 2002 in Banff on Wed. May 22nd? On the ABEC South web page, check out [Posey's Pick for the Month of May, 2002](#) - it's a link to several pdf files that you can view and/or download, giving a summary of his presentation, the actual slides, and supplementary reading on the application of computer modeling methods to building envelope design.

Number 97:

Wednesday, May 22nd, 2002

Gemini Structural System
steel stud/composite concrete structures, walls, floors and more

Presenter: Herbert K. Schilger, Innovator and Instigator (also Educator)

Topics: Carrying on from the title: multi-floor buildings; concrete thin shell walls; functional building envelopes;

CFS (what's that, Herb?) foundation walls; comfort basement floors; EPS foam air ducting system.

Bios: Educator - seven years at Technical High School and Community College

Instigator - Manufacturing Business of components in Cold Formed Steel Stud composite with concrete (Thin Shell Panels for a variety of applications)

Innovator - the use of Cold Formed Steel Stud composite with concrete opened a whole new method of construction. Known as "Gemini Structural System", many buildings were constructed using this technology in Canada, U.S.A and Mexico.

- Recognizing problems with Steel Stud construction at the exterior (Building Envelope) lead to the development of the EPS Foam Venting Panel (Rain screen and moisture evacuation out of the stud cavity.

- For the past seventeen years as President of Gemini Structural System Inc., Mr. Schilger has made many contributions to new and innovative construction techniques, reported in newspapers and professional magazines throughout North America. Herb has nine different Patents in Canada, U.S.A. and Mexico.

21 attendees

bar sponsor: Plastifab

Number 96:

Wednesday, April 24, 2002

Spray Foam Air Barrier Systems
Field demo at building site - see map below - Free pizza and pop

Presenters: Ener-Spray - with BASF sponsoring the meal.

Topics: Dennis Hayden of Igloo - how he incorporated foam into his new building.

Comments: Laverne Dalgleish, Executive Director, Canadian Urethane Foam Contractors Association. CUFCA Quality Assurance Program of Spray Applied Urethane Foam Systems.

Vaughn Ford - BASF Technical Agent, Walltite Air Barrier System and approvals.

Demo of Spray Foam Insulation / Air Barrier System: Kevin & Lane Cooper, Ener-Spray Systems. **Bios:** see above.

45 attendees

Thanks: BASF; Igloo

Number 95:

Wednesday, March 27, 2002

"A Pane in the Glass - Reflections on Windows"

Presenters: Four speakers, + several table-top shows from the trades. see our [brochure](#) .

Topics: Every Spring ABEC holds a more ambitious session than our usual monthly seminar and luncheon. As it happens, we're following up last month's talk on the CSA Window Standard with 4 more on residential windows:

design requirements, other standards + design aids, manufacturers' input, a review of moisture problems in BC, and a table-top trade show. Please [register](#) - forms returned as of March 19 have us planning for about 85, perilously close to full capacity. It should be a great show.

Bios: also in the [brochure](#): Chris Makepeace, Alan Dalgliesh, John Ink, and Brian Hubbs

102 attendees **bar sponsor: ABEC South**

Number 94: **Wednesday, February 27, 2002**
The CSA Window Standard - Changes, Updates and the Proposed Harmonization Standard with the U.S.

Presenter: Randy Smith, A.D. Williams Engineering Inc.

Topic: This will be a discussion of: - The latest changes to the standard - What is and isn't included in the standard - Efforts to harmonize with the U.S. standards - Proposed harmonization standard - rating system for the harmonization standard.

Bio: P.Eng., partner in the firm, 15-17 years experience in building envelope science and materials; serves on CSA Committee A440 (window standard), Calgary Heritage Authority; immediate Past President of ABEC South.

31 attendees **bar sponsor: A.D. Williams Engineering Inc.**

Number 93: **Wednesday, January 23, 2002**
SUSTAINABLE BUILDING DESIGN – What, Why, and How Much?

Presenter: Gordon F. Shymko, P. Eng, G. F. Shymko & Associates Inc.

Topic: Sustainable or "green" buildings are the subject of increasing public and professional interest. This is particularly true in Alberta, where the issue is coming to the forefront as the province struggles to assess and redefine its place in the new context of global environmental responsibility. Gord Shymko will describe the state of sustainable building design at the international, national, and local levels, and what it means to Alberta building designers. Topics will include defining sustainable design, the processes and resources required to design sustainably, costs and benefits, and government support programs such as CBIP and C-2000. The discussion will be clear, frank, and hopefully thought-provoking.

Bio: Gord has specialised in energy efficient and sustainable building design and renewable energy technologies across Canada for over 18 years, with current and past advisory appointments to bodies such as NRCan, NRC, CSA, US Department of Energy, and numerous provincial, municipal and utility agencies. His award-winning firm also operates internationally, and his projects represent over one billion dollars in construction value.

39 attendees **bar sponsor: ABEC South**

Number 92: **Wednesday, November 28, 2001**
Ice Damming on Steep Roof Slopes

Presenters: Dennis Looten, FCSC, B.Sc. - Asset Consulting & Inspections Ltd.

Topic: In mountainous locations ice damming can have dramatic impact on the performance of buildings user safety. Changes to roof systems can have a positive or negative impact on the development of ice along the eaves and up the slope. We will be exploring excessive ice build up through a recent project at the Panorama Ski Resort. We were first consulted in June 1999 to investigate the extensive water infiltration problems at the Horsethief and Toby Creek Lodges at the Panorama Mountain Village.

Bio: Specialist in roofs and moisture protection, ARCA Accepted Inspector since 1977. With Alberta Roofing Contractors Association from 1982, (CEO 1987 - 1998). Now offers expertise on roofing concerns through his

own firm.

42 attendees

bar sponsor: Bock Roofing Ltd

Number 91:

Wednesday, October 24, 2001

Phoenix Place - Recladding

Presenters: Anton and John Vlooswyk of Building Envelope Engineering Inc.

Topic: Anton and John will present the cladding retrofit of a 20 storey Calgary office tower. The existing cladding suffered water leakage during wind driven rain, condensation during winter conditions and the departure of stones from the stucco cladding. The building was reclad with a structural liner, insulation and a metal panel system, significantly improving the performance and appearance.

41 attendees

bar sponsor: Thermal Systems Inc.

Number 90:

Wednesday, September 26, 2001

Annual General Meeting and Brag Session

Presenters: Shane Williams, Cameron Ashley; Harry Koyle, Bakor; Randy Smith, ADWE

A.G.M.: Please contact Past President Randy Smith to nominate someone for a position on the executive. This can also be done at the meeting.

Brag: Spend 5 or 10 minutes bringing us up to date on new procedures, problem solutions, products with great potential. Or what about problems that need solutions? If you have something to tell that we should hear, try out your idea on Bob.

29 attendees

bar sponsor: ABEC South

Number 89:

Wednesday, September 26, 2001

August notice: Annual General Meeting and Brag Session

Presenters: T.B.A. [To Brag, Advise ... bob.passmore@bssl.net , or tel. 543-2258]

A.G.M.: Please contact Past President Randy Smith to nominate someone for a position on the executive. This can also be done at the meeting.

Brag: Spend 5 or 10 minutes bringing us up to date on new procedures, problem solutions, products with great potential. Or what about problems that need solutions? If you have something to tell that we should hear, try out your idea on Bob.

Number 88:

Wednesday, May 23, 2001

Two exterior insulated rain screen wall systems, a review

Presenter: Bob Passmore, Building Science Specialists Ltd.

Topic: A facility, currently under construction in Calgary, has been the unique site for installation of two different rainscreen wall systems on the same project. Both systems use split face block and metal cladding as the exterior skin, however one uses conventional rigid board insulation and the other, BASF foamed in place insulation and air barrier system. The site has offered an opportunity to study the advantages and disadvantages of both of the systems. A review of the systems from a building envelope perspective will be presented.

Bio: Registered architect, U of C Faculty of Environmental Design, graduated 1986. Worked 13 years as project architect, building scientist and contracts administrator for various architectural and consulting firms; on ABEC executive since 1988; from 2000, sessional instructor in building science and technology, at the Faculty of Environmental Design; 4 years with Building Science Specialists (currently a partner), providing building envelope design input and review for both new construction and renovation projects.

34 attendees

bar sponsor: BASF

Number 87:

Wednesday, April 25, 2001

SCHOOL ENVELOPE FAILURE

Presenter: Randy Smith, A.D. Williams Engineering Inc.

Topic: So you think you've heard everything about building envelope failures? Here we have a thing of beauty, architecturally speaking, with hidden depths where the devil has played havoc with the details. Randy will name no names, but neither will he pull any punches as he reveals how it took only 5 short years for a building in sunny, dry Calgary to misbehave as if it lived on the lush, wet BC coast.

Bio: P.Eng., partner in the firm, 15-17 years experience in building envelope science and materials; serves on CSA Committee A-440 (window standard), Calgary Heritage Authority; immediate Past President of ABEC South.

47 attendees

bar sponsor: Imasco Minerals Inc.

Number 86:

Friday, March 23, 2001

One-day Seminar: "Building Envelopes in Historic Buildings"

Presenters: Bill Brown, Mark Lawton, Chris Borgal, Morrison Hershfield Ltd.

What? Developed by MH and the Heritage Conservation Program of Public Works & Gov't Services Canada, this Seminar is really a 2-day workshop crammed into one. Bill, Mark, and Chris will deal with difficult trade-offs between maintaining historic appearances and improving envelope performance economically. Calgarians are discovering a growing number of heritage structures in need of new life for the envelope.

Who? Those who work to keep historic buildings useful as well as reminders of our past will be able to sit with building envelope experts to learn new strategies for introducing better control of indoor climate and extended service life. The Panel discussion at 4:00 will no doubt bring out conflicting requirements: preserving the Look, vs. prolonging the Life and effectiveness of historical building facades.

NB: This 8:00 to 5:00 Annual Seminar on Friday replaces our regular March luncheon meeting. See registration form on the back for more info. You won't regret coming out in great number for this great learning opportunity.

100 attendees

Number 85:

Wednesday, February 28, 2001

Masonry walls: Past, Present and Future

Presenter: Dr. Michael A. Hatzinikolas, Ph.D., P.Eng ... you know, Dr. Mike!

Outline: All we know for sure is that Dr. Mike knows where all the skeletons are buried when it comes to building science applied (or not) to masonry walls. Come, see, and hear what he is about to dig up for us.

... continued ...

Bio: Dr. Mike is one of the foremost experts in the masonry industry within Canada. He is a structural engineer who has received his M.Sc. and Ph.D. degrees through advanced research in masonry. For the past 22 years he has served the industry as Executive Director of the Canadian Masonry Research Institute providing advice and expertise to engineers, architects, building officials, government agencies, suppliers and contractors throughout the construction industry in Canada. Dr. Hatzinikolas is also an Associate Professor of Engineering at the University of Alberta and is the co-author of the "Engineered Masonry Design – Limit States Design" textbook. Dr. Hatzinikolas also serves on the CSA Technical Committees for Masonry Construction (CSA A371) and Masonry Connectors (CSA A370).

35 attendees

bar sponsor: Masonry Contractors Assoc., Southern AB

Number 84:

Wednesday, January 24, 2001

Hazards and Control of Mould in Buildings

Presenter: Ken Sterling, BSc, CPHI(C), PHH Environmental Limited

Outline: Introduction to Concerns in Buildings; Ecology of Mould Growth in Buildings; Health Effects; Other Microbial Contaminants in Buildings; Investigations & Test Methods; Regulations & Guidelines; Remediation; Prevention & Management.

Bio: Ken has a B.Sc. in Biology and is certified as a Public Health Inspector with over 19 years of occupational hygiene experience. He has extensive experience in the areas of occupational hygiene audits / investigations, indoor air quality assessments, asbestos management, WHMIS compliance and noise impact assessments. Ken is a Senior Project Manager for Southern Alberta / Saskatchewan and is based in PHH's Calgary office.

30 attendees

bar sponsor: PHH Environmental Ltd

Number 83:

Wednesday, November 22, 2000

Construction Tolerances

Presenter: Jim Posey, Posey Construction Specifications.

Topic: Problems with construction tolerances are common causes of impaired performance and unacceptable appearance in construction, and are potential sources of liability to both building designers and contractors. Jim will discuss issues with tolerances not adequately considered in the design of construction details. A brick veneer / steel stud wall detail will serve to demonstrate both potential problems and solutions. In buildings, each stage of construction is often adapted to the variations in the previous stages. Parts are made to measure or modified to fit. In most other industries parts are made interchangeable instead. To succeed, either approach requires planning at the design stage, as well as skill in execution.

43 attendees

bar sponsor: Bakor

Number 82:

Wednesday, October 25, 2000

Silicones vs. Urethanes in Construction

Presenter: Dave Kimball, Technical Service Specialist, Dow Corning Corporation

About Dave: Started at Dow Corning in 1979 at the Midland, Michigan headquarters with a B. Sc. degree in Chemistry. He worked in a variety of Technical Service and Development roles prior to moving to the Sealants manufacturing plant in Elizabethtown, Kentucky in 1988. In Elizabethtown, he served in a number of Quality Engineering, Reliability, and Technical Development positions. In 1996 Dave moved to the Fremont, California Technical Center and currently provides management of the laboratories there as well as Technical Specialist support for the Northern Western Region. ... continued ...

40 attendees

bar sponsor: Dow Corning

Number 81:

Wednesday, September 27, 2000

Annual General Meeting and bragging session

Presenter of AGM: Rick Godderis, Building Science Specialists Ltd & Past President

Topic: Election of new slate of directors (see the current declared candidates below). If you want a crack at any positions, please get your nominations in A.S.A.P. to current president Randy Smith at 263-2393, extension 229. And BRAGGERS! We need more BRAGGERS! Call Bob Passmore at 703-7535. So far we only have Randy Smith, talking about "The Soccer Dome". C'mon, it's only 5 or 10 minutes. It'll be fun!

23 attendees

bar sponsor: ABEC South

Number 80:

Wednesday, May 24, 2000

Light gauge steel design at U. of C.

Presenter: David Thompson, Campbell Woodall and Associates Consulting Engineers Ltd.

Topic: Cascade Hall is a 120-unit residence built to accommodate 400 students, visiting scholars and athletes. The hall is a 5-story building with of 16,000-sq. meter of living space. What makes Cascade Hall unique is the light gauge steel and composite concrete structural system supporting the building. David will discuss the design considerations used to ensure an economical and durable building was achieved.

David Thompson is an Associate at Campbell Woodall and Associates Consulting Engineers Ltd. He graduated from the University of Waterloo in 1979 and has a M.Sc. from the University of Alberta in Structural Engineering. In his 12 years at C.W.A. David has designed over 40 light gauge steel buildings. He has been a member of ABEC for the last four years.

22 attendees

bar sponsor: A.D. Williams Engineering Inc

Number 79:

Wednesday, April 26, 2000

Building Envelope Research in BC

Presenter: Don Hazleden, MAIBC MRAIC, Houseworks Building Science Inc.

Topic: In the Vancouver climate with over 1700mm of rain PER YEAR, the water buildup in walls can be extensive. The moisture incident directly on the wall can amount to more than 400mm per square metre of wall; that's over 400 kg/m². This is a tremendous moisture load and needs to be accounted for in wall design and construction.

Water ingress causing interior finish damage is just the beginning of trouble. If water is trapped in the wall, wood structure rots and steel studs corrode. Wood scientists advise that this damage can start in six weeks. In twelve weeks rot can spread enough to require complete replacement of the exterior stud wall and the adjoining joist structure. Steel corrosion will take longer, but corrosion at critical fasteners can hasten wall failure. Repair assessments have ranged as high as \$50,000 per unit for major restoration of a wood frame structure, and steel structure repairs will be even higher. The problem is both in the selection of materials and in how they are being used.

What can be done about it? In 1995 the Building Envelope Research Consortium (BERC) was formed of representatives of all the major associations and regulatory bodies involved in housing in BC. The BERC has set up eight research programs designed to study the problems and come up with recommended solutions. Additionally the BERC wants to ensure that the information gets out to the industry. This presentation will outline the programs and technology transfer initiatives.

25 attendees

bar sponsor: Jim Warren of Maxim Morrison Hershfield

Number 78:

Wednesday, March 29, 2000

AWCB/ABEC Residential Building Envelope & Stucco Seminar

Our regular meeting has been cancelled because we are co-sponsoring a full-day seminar with the Alberta Wall and Ceiling Bureau, and we hope that as many as possible will attend.

See below for the details, and a registration form.

260 attendees

Thanks to Alberta Wall & Ceiling Bureau

Number 77:

Wednesday, February 23, 2000

Field Applied, Dimension Cut Stone

Presenter: Gary Sturgeon, Code Development Engineer for Masonry Canada.

Topic: Dimension cut stone can be found on nearly all of our treasured, historical buildings. Although stone wall design and construction techniques have changed significantly over the years, and particularly in the last two decades, the stone façade has retained its position as the most permanent and aesthetically pleasing of all wall systems. Because of the rapid change that this segment of the masonry industry has undertaken, the design and

construction of state-of-the-art stone wall systems is often not well known or understood by the practitioner in the context of today's structures and schedules. **This presentation examines the materials, design, testing, and construction of field applied, dimension, cut stone wall systems, with a focus on Alberta, and in particular, on the Calgary construction scene..**

Gary Sturgeon is a structural engineer, and has received his B.Eng. and MSc. degrees through advanced research in masonry. Between 1980 and 1990, as a masonry contractor in Alberta, he supervised new and historical masonry construction on numerous projects using all types of available masonry materials and accessories. Gary serves on the Technical Committees of all of the CSA Masonry Standards.

35 attendees **bar sponsor: Masonry Contractors' Assoc., Southern R.**

Number 76: **Wednesday, January 26, 2000**
TingWall: the first curtain wall based on a dual airloop system

Presenter: Dr. Raymond Ting, Chairman, Advanced Building Systems Inc, Pittsburgh, PA

Topic: The dual airloop system improves on the performance of earlier unitized curtain walls employing the rain screen principle of separating rain from wind to lessen reliance on "perfect" seals. The joints around glass and metal panels contain both outer (wet, drained) and inner (dry, protecting the panel seals) air loops, to prevent water leakage no matter where the inevitable seal imperfections occur. TingWall can be designed for virtually any facing material, for new construction as well as many retrofits, using existing mullions. Owners like the look, the competitive pricing, and the speed of installation.

Ray Ting is no newcomer to the curtain wall industry. As a key structural designer for H.H Robertson for many years, he tackled the failures of unitized curtain walls to exclude rain, and developed his own "fourth generation" system, from principle to practical implementations. Ray will have model components to supplement his presentation, and will gladly respond to comments and questions on the novel aspects of TingWall. *Check out the [TingWall web site](#).*

40 attendees **bar sponsor: Advanced Building Systems Inc.**

Number 75: **Wednesday, November 24, 1999**
Contract Tendering Practices - an Update

Presenter: W. Donald Goodfellow, Q.C., C.Arb.

Topic: On April 22, the Supreme Court of Canada allowed the appeal of M.J.B. Enterprises, setting aside earlier decisions of the Alberta courts that threatened to throw accustomed ideas about obligations between parties engaged in construction tendering into disarray. The basis of M.J.B.'s claim was that, as lowest proper bidder, they had lost profits when Defence Construction awarded a contract to another contractor whose bid did not conform to the tender requirements. Mr. Goodfellow, who represented M.J.B., will discuss the judgement and its implications for owners and contractors who participate in construction tenders.

Mr. Goodfellow: is a member of the Law Societies of Alberta, B.C., the Northwest Territories, and the Yukon. He is a founding fellow of the Canadian College of Construction Lawyers, and specializes in construction law.

45 attendees **bar sponsor: Western Inspection Ltd.**

Number 74: **Wednesday, October 27, 1999**
Vapor Permeable Membrane Air Barriers and Stucco Systems

Presenters: Theresa Weston, Research Associate, DuPont Non-Wovens, Richmond VA. and Shane Williams, Dupont Tyvek Representative for Western Canada.

Topic: Vapor permeable membranes function in wall systems as both air barriers and water resistant barriers. Water-resistant barriers are installed between the exterior cladding (and cavity if it exists) and the sheathing. This membrane while resisting the penetration of air and bulk water should not hinder the outward diffusion of water vapor, in the case of exfiltration in winter. Shane Williams has kindly arranged this presentation by a well-qualified authority on membranes designed specifically for the construction industry. The presentation will discuss performance properties of water-resistant barriers and the implications to wall performance with emphasis on stucco wall systems.

Dr. Weston: has a Ph. D. in Chemical Engineering from the California Institute of Technology (1985), and she represents DuPont as a member of several construction industry activities:

Canada's Consortium on Moisture Management in Exterior Wall Systems,
CMHC's "Envelope Drying Rate Analysis" testing program,
US DOE's Advanced Residential Buildings Consortium,
NIBS-Building Envelope and Thermal Environment Council (BETEC), + 8 more.

58 attendees

bar sponsor: Cameron Ashley Canada Inc

Number 73:

Wednesday, September 22, 1999

Annual General Meeting and bragging session

Presenters: Pierre couture, BASF; Bob Passmore, Building Science Specialists; Randy Smith, A.D. Williams Engineering Inc.

The Annual Bragging Session: Pierre will talk about the first air barrier system approved by CCMC, and perhaps will include some insights into the CCMC evaluation process. Bob and Randy each have a tale to tell about things going wrong, and what to do about it. Bob calls his topic, "**The wall from Hell**", and Randy would have liked a similar title for his water penetration problem.

Bob Passmore, program director, is still open for further presenters. So give him a call at 543-2258 or even better, **e-mail him: bobpass@telusplanet.net**.

30 attendees

bar sponsor: ABEC South

Number 72:

Wednesday, August 22, 1999

August notice: Annual General Meeting and bragging session

Presenters: As yet unidentified Braggers. Bob has found no takers so far – and that's no Bull.

The Challenge: Having successfully introduced the Annual Bragging Session last year as part of our Annual General Meeting we shouldn't just give up this year's opportunity for a repeat session without a fight. We had three or four presenters last year, who seemed to enjoy themselves, and who wouldn't? The rules are, no unkind remarks or critical comments are allowed either during or after your 5 minutes of fame in front of your colleagues.

Step right up, folks: Pleased at the performance of a new product? Have you nipped a problem in the bud and saved a project from big trouble? What about recurring faults you've seen, for which you have effective fixes? You can do us all a favour by passing on your comments, and Bob Passmore, program director, will be so relieved to hear from you. Otherwise, he might start to think we're not so smart after all. ...

Number 71:

Wednesday, May 26, 1999

RENOVATIONS: 444 - Seventh - Barclay Centre

Presenters: Henry Schlichter, Singleton ARCHITECT, George Binder, Dominion Construction, and Ray Groom, Bahry's Glass.

Topic: As building envelopes of numerous office towers of the 50's and 60's reach the end of their life cycle, some owners have discovered that their reconstruction can have economic benefits. Demolition is most often less desirable. The renovations to the 444 Seventh building at Barclay Centre resulted in a 'new look', attractive to tenants, on stream in the marketplace in less than half the time it would take to design and construct a new building from scratch. But working within the constraints of an existing building requires a different approach than new construction.

Henry Schlichter will describe design considerations for the curtain wall system; George Binder will review construction concerns, and Ray Groom will describe the challenges of developing details for the glazing and the installation process. Come and hear how a derelict building regained its attractiveness. Everybody's happy .. the owners have it fully leased, no more vacant building to plague the City, and the architect has another beautiful building and a happy client to his credit.

bar sponsor:

does anyone remember who?

Number 70:

Wednesday, April 28, 1999

Critical Details for Exterior Insulation Finish Systems

Presenters: John F. Slowski, Tech Sales Rep for Georgia-Pacific in Western Canada and Bill Cooper, Sales/Tech Specialist for STO Finish Systems Canada.

Topic: John Slowski will lead off by presenting E.I.F.S. details and discussing how they are used, where they apply, and how they work and function. You may be familiar with Georgia-Pacific's Dens-Glass Gold, a patented "paperless" sheathing created to withstand weather and moisture exposure, and used as a substrate for acrylic and conventional stucco.

Bill Cooper will then talk about proper specifications for E.I.F.S. and their importance. He speaks from 17 years' experience as a plastering contractor, and is currently President of Alberta Wall & Ceiling Bureau.

bar sponsor:

John F. Slowski, Georgia-Pacific

Number 69:

Wednesday, March 24, 1999

Stucco as an Exterior Cladding - Details and Specifications

Presenter: Robert Drury, Executive Director, Northwest Wall and Ceiling Bureau.

Topic: So you think you know all about stucco? Does that include fire-rating assemblies, and the Exterior Insulation and Finish System (EIFS) as it relates to drainage of driving rain? How about scope of responsibility and quality control inspection procedures?

Robert Drury does know about stucco. He's written articles, specifications, and standards for the wall and ceiling industry, has taught construction materials courses at the School of Architecture, U. of Washington and Washington State U, has extensive field inspection experience, and serves on ASTM committees and other national trade association technical committees. Here's a great opportunity to add to your own store of knowledge on the subject of the pros and cons of stucco as an exterior cladding.

bar sponsor:

David Sacks, IMASCO Minerals Inc.

Number 68:

Wednesday, February 24, 1999

**Ventilation, Infiltration and Energy Use in Apartment Buildings
(or Why Apartment Buildings Stink)**

Presenter: Duncan Hill, High-rise & Multiple Innovations Group, Research Div., CMHC.

Topic: Apartment buildings are often associated with undesirable odours, noises, comfort problems, unreasonable utility bills and smoke proliferation during fire emergencies, and also building envelope durability problems. All these problems can be linked to air movement into, out of, and through apartment buildings. CMHC recently completed several studies of how air moves in buildings and the apparent consequences. Energy consumption patterns allowed them to isolate energy costs associated with ventilation and air leakage. Building envelope airtightnesses for a range of building types were also measured. The performance of mechanical ventilation systems was studied and the benefits and difficulties with compartmenting suites evaluated. Viewed together, the results of this research reveal many surprising and not so surprising patterns. Duncan will summarize the findings for mid and high-rise apartment buildings that identify the problems associated with air movement, poor or non-existent mechanical ventilation systems, and leaky building envelopes. He will propose how solutions might be implemented in new and retrofit buildings.

bar sponsor:

the Vlooswyks, Building Envelope Engineering

Number 67:

Wednesday, January 27, 1999

Wind-Driven Rain Patterns on Walls

Presenter: Alan Dalgliesh, formerly a Senior Researcher, IRC/NRC.

Topic: It's easier to keep rain out of walls if you know which parts get the wettest, and which parts could stay nearly dry if drainage is controlled. As well, non-uniform intensity of wetting combined with unfavourable drainage patterns adversely affect the appearance of the wall (dirt markings and pollutant stains, alternating with washed areas). By observation, we know that wind drives most of the rain onto the tops and sides of the windward wall. Wind and rain action on a block building will be demonstrated graphically by output from a computer program based on the work of researchers at NRC and at other centres around the world.

bar sponsor:

Randy Smith, A.D. Williams

Special Announcement:

Wednesday, November 30, 1998

Building Science and the Building Envelope

Building Science and the Building Envelope

9:00 am to 4:30 pm, including 2 coffee breaks

Saturday, Jan 9, 1999

Saturday, Jan 23, 1999

Saturday, Jan 30, 1999

The Envelope Environment

Keeping the Envelope Dry

Predicting Moisture Performance

Conditions Within the Envelope

The Envelope and the Building

Building Science and Practice

In Vancouver, the Architectural Institute of British Columbia is offering Gus Handegord's "Study Course for Practitioners, Teachers, and Students of Building Science" as a three day course, the first of four Modules leading to Building Envelope Certification under the AIBC.

In Calgary, ABEC, with AIBC and the Alberta Architects Association as Co-Sponsors, will run this course for our members, both those engineers or architects seeking Building Envelope Specialist Certification, and any others interested in the course content.

Instructor: ABEC is fortunate to have Gus Handegord right here in Calgary, for many years our Education Director, co-author of the primary reference text, "Building Science for a Cold Climate", as well as the sole creator of this practitioners' guide to applications. Gus plans to cover recent concepts in managing moisture in the building envelope, in addition to the basic course content.

Number 66:

Wednesday, November 25, 1998

Performance of a Brick Veneer Steel Stud Wall System

Presenter: Jacques Rousseau, Canada Mortgage and Housing Corporation, Ottawa

Topic: The economical and attractive BV/SS system has become very popular over the last twenty years, but some members of the construction industry are worried about long term safety and serviceability. To address these concerns, CMHC commissioned the monitoring of a generally well designed and constructed seven storey residential building in the Ottawa/Hull region. Temperature, moisture, and air pressure sensors were logged for several periods of two to four weeks, representative of the different weather that the region sees in a year. Jacques will present the findings, which suggest a need for improved design and construction standards since the BV/SS wall system under study likely represents "typical" construction, yet may experience significant distress problems over the long term

bar sponsor:

Rick Godderis, Building Science Specialists Ltd.

Number 65:

Wednesday, October 28, 1998

Mortarless Technologies

Presenter: Rick Andison, Calgary Masonry Supplies

Topic: This will be a brief outline of several masonry systems whereby \$\$\$ can be saved (How many? Rick says "lots", and promises to discuss "How To", markets, applications, etc.)

- 1) NovaBrik - concrete brick siding
- 2) Allan Block - applications, life cycle costing
- 3) EZ-Stack - dry stack conc. block wall system
- 4) Tri-Lock - interlocking erosion control block

bar sponsor:

Rick Andison, Calgary Masonry Supplies

Number 64:

Wednesday, September 23, 1998

Annual General Meeting + 4-part Bragging session

Braggers: 1) Kevin Brown, Gravity Engineering

- 2) Kevin Cooper, Custom Metal Contracting Ltd
- 3) Randy Smith, Read Jones Christoffersen Ltd
- 4) Jim Warren, Morrison Hershfield Ltd

- Topics:
- 1) CFCN Studio Roof Repairs
 - 2) Sir Winston Churchill Pool Renovation
 - 3) Kensington House: AB & Water Penetration Problems & Repairs
 - 4) High Rise Office Building at Portage & Main: Bldg Envelope Case History

bar sponsor: RJC (Read Jones Cristoffersen)

Number 63: **Friday, May 29, 1998**
Preservation of Historic Buildings

Presenter: Lorne Simpson, Simpson Roberts Wappel Architecture Interior Design Inc.
 Even durable buildings may need special attention by the time they are recognized as having historical value. Banff Upper Hot Springs will get a new lease on life by densifying the original concrete. Mass concrete of the Western Irrigation District 1912 Headgates will be consolidated using low viscosity epoxy. Other projects, e.g. Stephen Avenue Mall, require cleaning of stone. As building stock ages, the demand for this sort of work will grow.

bar sponsor: for May; any ideas who?

Number 62: **Spring Seminar!** **Thursday, April 23, 1998**
A Day with (Dr.) Joe Lstiburek

Presenter: Joe Lstiburek, Building Science Corporation
 As promised in the March Newsletter, this one-day building science seminar replaces our normal Wednesday luncheon meeting, so remember it's one day later, at the Red and White Club, (phone 220-7101) on the west side of Crowchild, just across the street from our usual meeting place. Next month it will be back to business as usual.

bar sponsor: ABEC South ??

Number 61: **Wednesday, March 25, 1998**
The Case of the Collapsing Soffit - & other Tales of Woe

Presenter: Rick Godderis, Building Science Specialists Ltd.
 Want to know some of the interesting things that happen in the life of a building science specialist? Rick has had his share of excitement with jobs that test your grasp of the fundamentals. Featured here will be a collapse with a corrosion component, reminding us once again, never to skimp on fasteners. Another cautionary tale involves a trail of "creeping black", and there are more, all illustrated by video clips, that Rick will bring to your attention. Audience participation is a must!

bar sponsor: Dave Lawrence, W.R. Grace & Co. of Canada

Number 60: **Wednesday, February 25, 1998**
Metal Cladding & Roofing - Custom Metal Contracting Ltd.

Presenter: Kevin Cooper, C.E.T. - Marketing Manager
 Along with a brief history of the company (the Custom Metal Profile, get it?), Kevin's 30-minute slide presentation will give an overview of metal cladding and roofing projects. Economy vs. aesthetics, development and design, and the unique features of CMP's systems will all be up for discussion.

bar sponsor: Custom Metal Contracting Ltd.

Number 59:

Wednesday, January 28, 1998

The Canadian Building Digests - DBR's Main Claim to Fame

Presenter: Gustav Handegord, P. Eng., Handegord and Company Incorporated

The CBD's were the most successful publication of the Division of Building Research and, in spite of their age, continue to be relevant to current building technology and practice. Recollections regarding their development, and discontinuance and attempts at their resurrection, reincarnation, and revision, allow selection of some classics and some reasons for their continued currency and suitability in this information age.

bar sponsor:

AGRA Earth & Environmental

Number 58:

Wednesday, November 26, 1997

The Glass Roof: Sloped Glazing Need Not Leak

Presenter: Chris B. Makepeace, Manager, Walls & Windows, Alberta Public Works

There is no such thing as a standard design for a sloped glass roof. Glass and aluminum do not leak, but joints between the glazing system and the rest of the roof must have seals designed to have the least and briefest possible contact with water to be successful. Is this really possible? Is it necessary? Can it be built? Having seen more than 100 leaking sloped glass roofs, Chris knows.

Chris has over twenty years experience in the glass and glazing industries, has lectured extensively and is regarded as a leading authority on glass curtainwall and sloped glazing systems. In the Building Sciences Branch he evaluates proposed projects and advises on the resolution of problems in existing buildings. He has worked on major projects in Edmonton, Toronto, and Calgary.

bar sponsor:

Bob Pogue of Actiplast

Number 57:

Wednesday, October 22, 1997

Rain Penetration Control - in the Coastal Climate of BC

Presenter: Don Hazleden, Chair of the BC Building Envelope Research Consortium

As architect and program manager for CMHC, Don has been responsible for over 4500 units of housing in over 200 projects, and currently manages the delivery of research and technology transfer for the housing industry in BC. He will tell us how the results of the **Field Survey of Building Envelopes in the Coastal Climate of BC** should be responded to by architects, specifiers, and builders in wet climate areas.

Don is also chair of the AIBC Professional Development Committee and co-chair of the AIBC Housing Committee. He sits on the CHBA BC Technical Advisory Committee, and the National Housing Research Committee.

bar sponsor:

Building Envelope Engineering

Number 56:

Wednesday, September 24, 1999

The Building Environment in Hong Kong

Presenter: Tang Lee, MRAIC, Faculty of Environmental Design, University of Calgary

Tang Lee spent the last five months teaching in Hong Kong. His observations and insights into the building industry, and how it fits within the Asian economy and culture is interesting and informative. Tang will contrast the mechanisms that facilitate (and barriers that hinder) the building industry. He will use slides to illustrate some of the designs, construction details, and even construction safety violations.

Tang Lee teaches building science, design, professional practise, construction management, and indoor air quality at the University of Calgary. He continues to practise architecture and conducts investigations in several areas.

bar sponsor:

AGRA Earth & Environmental

Number 55:

Thursday, May 29, 1997

Future Trends in Roofing in Canada

Presenter: Dennis Looten, C.A.E., B.Sc., C.E.O. of Alberta Roofing Contractors Assoc.
Curious about the various trends in the roofing industry? Dennis will be covering the developments and directions of membrane systems, steep roofing, and metal roofing. Not only that, he will be discussing the potential problems relating to these trends.

bar sponsor: Alberta Roofing Contractors Association

Number 54: Wednesday, April 23, 1997
Avoiding Construction Disputes

Presenter: Dave Burnes, P.Eng., Engineer/Claims Consultant for ISRM Ltd.

Canada is becoming a more and more litigious society every day and this is certainly reflected in the field of construction where dealing with lawsuits or the threat of lawsuits has become very common for architects, engineers, and building scientists. although the field of building envelope engineering is a relatively new science, most construction related claims or disputes arise from common causes and these will be discussed with some emphasis placed on the specific subject of building envelope engineering.

bar sponsor: Building Science Specialists Ltd.

Number 53: Wednesday, March 26, 1997
Guideline on Durability in Buildings

Presenter: John Vlooswyk, Building Envelope Engineering

John is a civil engineer, a 17-year veteran in the building envelope discipline, and Principal of BEE in Calgary for the past 10 years, specializing in design, testing, inspection and evaluation. He has been active on the Executive of ABEC since it was founded, serving as President for several years. John was on the CSA Technical Committee that produced the Guideline on Durability in Buildings.

... continued ...

John's presentation is based on a Paper presented at the 7th Conference on Building Science and Technology this month in Toronto. It was co-authored with Adaire Chown of the Canadian Code Centre, National Research Council. The guide is the first of its kind in North America, to assist designers and owners in creating and maintaining durable buildings. He will introduce the guide, outline key issues, and illustrate methods of implementation.

bar sponsor: AGRA Earth & Environmental

Number 52: Wednesday, February 27, 1997
Curtain Wall Rejuvenation/Projects Utilizing Film Products

Presenter: Fred Chappell, Alberta Tinting Services - 3M Dealer for Alberta

Fred has been involved in the solar and safety film industry for the past twelve years, first as sales manager for a previous dealer, and now as owner of Alberta Tinting Services (ATS). He will cover several topics, including thermal breakage of glass, and product applications in various fields. You will probably find your own concerns dealt with, but if not, feel free to bring them up. Fred will explain what it takes to get a good film as he goes into the characteristics of various product types.

Those products will surely include high performance safety and security films, as well as graphic films. 3M's Scotchtint and Scotchshield products have ATS as the authorized dealer/applicators, so Fred will no doubt be getting down to details in advising how to use them wisely in curtain wall retrofits.

bar sponsor: Alberta Tinting Services

Number 51:

Wednesday, January 22, 1997

Material Compatibility Problems and Solutions

Presenter: Harry Koyle of Steels Industries, introduction by Rick Godderis

There are two types of incompatibility issues: between different materials, and between a material and the environment in which it is required to function (a misapplication). Using real job-site problems, this presentation should heighten your awareness of these issues, what to watch for, questions to ask, and ways to work out solutions. These issues are absolutely critical to the long-term durability of air barriers, for if they are handled poorly, you may quickly discover a weak link, resulting in failure of the whole system.

The focus will be on tying sheet air barrier wall membranes together with roofing membranes, such as PVC, EPDM, and Asphalt BUR, as well as the use of foam for hard-to-seal situations. We encourage open discussion about the issues and examples of your own.

bar sponsor:

Steels Industries

Number 50:

December 1996

Wednesday January 22 1997 Luncheon Seminar

You may wonder ... the next meeting is in January, so why a December NewsLetter?

TA DA! Our next meeting will feature the audited accounts for FY 95/96. And the rules say that members are entitled to 30 days' notice of such a meeting. By the way, our Fiscal Year runs from August 1st to July 31st.

Wait, there's more ...

We have re-done our brochure, stating our purpose as a non-profit society, describing our activities, and providing a membership application form. Each year we use this brochure for our annual membership drive, and again this year we expect to enclose copies with the January BOMA NewsLetter.

Over the years, the executive have wrestled with the question of whether or not to offer something extra in the way of a corporate membership, while still retaining our character as an association of individuals dedicated to the promotion of understanding of the building envelope. This year we propose to take the plunge with a "Supporting Corporate Membership" at \$65, while keeping the individual membership at \$48.

Some corporations have been very supportive, with several of their staff signing up as individual members and taking active roles in ABEC. The corporate membership will recognize their support with a wall plaque or certificate the first year, with medallions or seals for subsequent years, as well as covering the annual fee for the first member. Additional annual memberships will be at the reduced rate of \$35.

7th Conference on Building Science and Technology ... Durability of Buildings

Learn about Design, Maintenance, Codes, and Practices, March 20,21, 1997 at Toronto Airport Hilton. Since the first conference in 1982, these two-day meetings have focused on the performance of buildings - in particular, the identification, assessment, resolution and avoidance of problems. It is a forum for the documentation and sharing of knowledge and information relating to the building enclosure and the interacting building systems. With the latest research conducted by Canada's top investigators in the dynamic and evolving field of building science, this conference will be of interest to anyone involved in the design, construction and maintenance of buildings. For more info on this conference, contact our Past President, John Vlooswyk (see bottom of page 1); to register, contact Angela McOrmond, ALM Management Services, T (905) 791-2761, F (905) 791-5107 email mcormond@interlog.com. Or visit Web site: www.acs.ryerson.ca/~hdoshi/bsc/7conf.html

Number 49:

Wednesday, November 27, 1996

The Characteristics of High Performance Window & Curtain Wall Systems

Presenter: Don Holt, Visionwall Technologies Inc.

This 45-minute audio-visual presentation will briefly look at some of the more important performance

characteristics of high performance window and curtain wall systems. Areas such as thermal, optical and acoustic performance will be discussed along with air and water leakage, installation and erection and testing. Pictures of system components and installation details and actual building installations will be shown. A brief question and answer period will follow the presentation and the speaker will be available for further discussion afterwards.

BUILDING BETTER ROOFS: National Research Council Canada's IRC technical seminar to be held in 15 cities across Canada, 08:30 to 16:30, advance registration \$250 (on site \$300, students \$75, + G.S.T.). In Calgary, November 25, it's at the Westin Hotel, 320-4th Ave. S.W. Call IRC in Ottawa at (613) 993-0435 to ask about registering.

Other sponsors are: Canadian Roofing Contractors' Association (CRCA), Hansed-Booth Inc., Canadian Construction Research Board, Public Works and Government Services Canada, Special Interest Group on the Dynamic Evaluation of Roofing systems (SIGDERS), B.O.M.A. (Edmonton), and Applied Science Technologists & Technicians of British Columbia (ASTT).

Speakers are: Bas. A. Baskaran, research officer at IRC; Robert J. Booth, a principal scientist at Hansed Booth; Peter Kalinge, technical director of the CRCA; and Ralph M. Paroli, research officer at IRC.

... continued ...

From the program: Performance of roofing components and systems; Roof design, construction and maintenance; When to re-roof; Roof membranes and metal roofs; Case studies - two points of view; Questions and panel discussion.

PAST SEMINAR PROCEEDINGS : Many of you have purchased proceedings from our past half- or one-day seminars on special topics, but we still have a few left that are costing us money for storage. More importantly, on the shelf they're no good to anyone. The executive plan to turn them over to educators at SAIT and the University of Calgary to be used at their discretion as valuable references and as learning tools. This is in line with ABEC's scholarship funding of those institutions. If any ABEC member, or anyone else that you happen to know is interested, would like to snap up any of the remaining volumes at only \$10 each before they go, please contact John or Anton Vlooswyk at 540-6562 before December 1.

bar sponsor:

Visionwall Technologies Inc.

Number 48:

Wednesday, October 22, 1996

Water Penetration Control

CMHC One-Day Seminar

Time: Tuesday, October 22, 8:30 am - 4:30 pm

Place: Coast Plaza Hotel
1316 - 33 St. N.E., Calgary

Topic: **WATER PENETRATION CONTROL**

Presented by: CMHC, the Professional Home Builders Institute of Alberta, and ABEC

You should have received by now notification from Jacques Rousseau of this jointly-sponsored one-day seminar. Our next luncheon seminar (which would have been the following day) will be on on November 20 instead.

For your convenience, here is an excerpt of the instructions for pre-registration, which is required, just in case you haven't got around to it yet:

Call Vicki Harris, Professional Home Builders Institute of Alberta, in Edmonton at (888) 325-9999 and have your credit card number or purchase order handy. The fee for PHBIA and ABEC members is \$90 + GST, and students get in for \$30 + GST (but must produce a current ID). For non-members, the price is \$149 + GST.

If you have completed the registration form, you can fax it to (403) 486-7896, instead of phoning.

For the benefit of old hands in Calgary, I was asked to mention that Coast Plaza Hotel was formerly known as

the Marlborough Inn.

bar sponsor: **no bar, no sponsor**

Number 47: **Wednesday, September 25, 1996**
Annual General Meeting

EXECUTIVE 1996/97		PRESIDENT	Rick Godderis P543-2255/F247-3769	PAST PRESIDENT	John Vlooswyk P540-6562/F257-0002
SECRETARY	Bob Passmore P244-1422/F229-0821	TREASURER	Anton Vlooswyk P651-1514/F257-0002	NEWSLETTER EDITOR	Alan Dalgliesh P286-2177/F286-9156
PROGRAM DIRECTOR	Randy Smith P248-4331/F248-2188	EDUCATION DIRECTOR	Gus Handegord P686-1027/F246-8926	SEMINAR DIRECTOR	Jim Posey P560-2551/F262-9080

Note: *This is all I could scrape up for Number 47, the last Newsletter prepared by Kathleen Fraser, the outgoing Editor, as noted below (excerpt from Number 49):*

Know your Executive, and how to reach them ...

Names of the current Executive members with their phone (P) and fax (F) numbers will be posted for your convenience, usually at the bottom of the first page of the Newsletter. We meet for an hour or so once a month and most of us count on spending several hours more to keep things rolling along. With that in mind, perhaps you will join us in thanking two volunteers of long standing who have just left the Executive: Choc Quinn, Proceedings Director, and Kathleen Fraser, Newsletter Editor. They have contributed much to ABEC South's success so far.

bar sponsor: **AGRA Earth & Environmental**

END OF ARCHIVE