



13th Canadian Conference on Building Science and Technology
The Future of the Building Envelope...
Building Upon Our Past

Winnipeg, Manitoba, Canada

May 10-13, 2011

conference agenda

Tuesday, May 10

6:00 - 22:00	Registration	Main Floor Lobby
7:00 - 8:30	Continental Breakfast	LaVerendrye Room north mezzanine
8:30 - 10:30	Hygrothermal Workshop	LaVerendrye Room north mezzanine
10:30 - 11:00	Coffee Break	North Mezzanine
11:00-12:00	Continuation of Hygrothermal Workshop	LaVerendrye Room north mezzanine
12:00 - 13:00	Lunch for Workshop Attendees	North Mezzanine
13:00 -14:30	Continuation of Hygrothermal Workshop	LaVerendrye Room north mezzanine
14:30 -15:00	Coffee Break	North Mezzanine
15:00-16:30	Continuation of Hygrothermal Workshop	LaVerendrye Room north mezzanine
15:00 -17:00	Seminar: Green Building Envelopes 101	Assiniboine Ballroom 5th floor Fort Garry Place
18:00 - 22:00	General Delegate Registration, Reception and Trade Show Opening with complimentary food and refreshments sponsored by our Diamond Sponsor, Building Professionals	reception area adjacent to Grand Ballroom 4th floor Fort Garry Place
21:00	Off Site Event: Welcome Mixer - Finn McCue's Pub Musical Entertainment by The Red River Ramblers	Johnston Terminal 2nd floor The Forks Market 25 Forks Market Road Walking escort meet in hotel lobby at 20:45

Wednesday, May 11

6:30 - 17:00	Registration	Main Floor Lobby
7:00 - 8:30	Buffet Breakfast and Trade Show sponsored by BASF - The Chemical Company	Grand Ballroom 4th floor Fort Garry Place
8:30 - 9:45	Introduction & Greetings Keynote Address - Dr John Straube	Grand Ballroom 4th floor Fort Garry Place
9:45- 10:15	Morning Refreshments and Trade Show sponsored by Polarfoam	Grand Ballroom 4th floor Fort Garry Place
10:15 - 12:00	Technical Sessions - Session 1	Crystal Ballroom/ Concert Hall 7th floor
Theory 1 Session chair: Bert Phillips	Crystal Ballroom 7th floor	Practice 1 Session chair: John Wells
Carl Fiocchi Sustaining Modernity: An Analysis of a Modern Masterpiece, the Gropius House		Concert Hall 7th floor
		Claude Louvouezo Challenges and Opportunities from Design and Construction of Drained Precast Wall Assembly

Theory 1 continued Crystal Ballroom 7th floor

Katarzyna Blaszak
Towards Sustainability: An Assessment of Potential in Toronto's Single-Family Housing

Paul Duffy
Codifying the Unvented Attic Assembly in Canada

Kim Pressnail
Overcoming the Challenges of Energy Retrofitting a Historic 1870's Solid Masonry Home : A Case Study

Practice 1 continued Concert Hall 7th floor

Stephane Hoffman
Design Considerations for Open Joint Rainscreen Cladding Systems

Ekaterina Tzekova
Integrating a Vented Airspace into a Spray-Foam Insulated Solid Masonry Historic Building in a Cold Climate: A Case Study

Cooper Stewart
Designing Net Zero Homes with ICF

12:15 - 13:30 Lunch Grand Ballroom 4th floor Fort Garry Place
Union Bank Tower Presentation - Mr John Wells

13:30 - 14:45 Technical Sessions - Session 2 Crystal Ballroom/ Concert Hall 7th floor

Theory 2 Crystal Ballroom
Session chair: Kevin Knight

Marcus Dell
Energy Consumption in Mid- to High- Rise Residential Buildings both before and after Enclosure Retrofit - a Top-down Approach

Colin Genge
Air Leakage Data Collection Accuracy & Repeatability

Alex McGowan
Energy Efficient Retrofits for Residential Building Envelopes

Practice 2 Concert Hall
Session chair: Kim Pressnail

Nick Trovato
Building Exterior Retrofit and it's Impact on Energy Performance

Trisha Niemeyer
Remote Monitoring of Air Movement through a High-rise, Brick Veneer and Steel-stud Wall System

Gary Proskiw
Energy Optimization of R2000 Upgrades

14:45 - 15:15 Afternoon Refreshment and Trade Show sponsored by Sto Corp and Province of Manitoba - Energy Division Grand Ballroom 4th floor Fort Garry Place

15:15 - 17:00 Technical Sessions - Session 3 Crystal Ballroom/ Concert Hall 7th floor

Theory 3 Crystal Ballroom
Session chair: Mark Bomberg

Ian Stahlbrand
Simulation of a Convective Air Loop in the Gemini Nested Thermal Envelope Low Energy House Design

Russell Richman
NTED™: Applicability of an Innovative Low Energy Home Design to Northern Climates

Franca Trubiano
Material Innovations in the Building Envelopes of High Performance Homes

Phalguni Mukhopadhyaya
Use of Vacuum Insulation Panel in Building Envelope Construction: Challenges and Opportunities

Practice 3 Concert Hall
Session chair: Graham Finch

Constance Thivierge
Building with CLT Panels - Durability Issues

Kevin Knight
Taking the Laboratory to the Field : Onsite Testing of Building Envelope Systems

Mark Lawton
Guidelines for the Practice of Building Enclosure Engineering

Hamid Vossoughi
Pushing the Limits with Glass Design - Challenges and Solutions

18:00 - 18:30	Reception	Provencher Ballroom main floor
18:30 - 20:00	Conference Dinner sponsored by our Platinum Sponsor Manitoba Hydro presentation - Colleen Kuruluk Honouring one who had led us into the Future	Provencher Ballroom main floor
20:00	Superb Entertainment - Jeopardy	Provencher Ballroom main floor

Thursday, May 12

7:00 - 8:30	Registration	Main Floor Lobby
7:00 - 8:30	Buffet Breakfast and Trade Show sponsored by Morrison Hershfield Ltd.	Grand Ballroom 4th floor Fort Garry Place
8:30 - 9:30	Keynote Address - Mr Thomas Auer	Grand Ballroom 4th floor Fort Garry Place
9:30 - 10:00	Morning Refreshment and Trade Show sponsored by Air-Ins	Grand Ballroom 4th floor Fort Garry Place
10:00 - 11:45	Technical Sessions - Session 4	Crystal Ballroom/ Concert Hall 7th floor

Theory 4 Crystal Ballroom 7th floor
Session chair: Fitsum Tariku

Russell Richman
Brute Force Optimization: Combining Mass Energy Simulation and Life Cycle Analysis to Optimize Building Design

Hamed Saber
Numerical Investigation of Thermal Transient Response of Basement Wall System with Low Emissivity Material and Furred - Airspace

Brittany Hanam
Development of an Open Source Hourly Building Energy Modeling Software Tool

Taohida Parvin Akhi
Experimental Investigation to Estimate Effective Modulus of Elasticity and Shear Modulus for Brick Masonry Wall in Flexure

Practice 4 Concert Hall 7th floor
Session chair: Peter Kidd

Graham Finch
Meter Calibrated Energy Simulation of High Rise Residential Buildings - Lessons Learned

Ekaterina Tzekova
Evaluating the Effectiveness of Energy-Efficient Retrofits on Multi-Use Residential Buildings: Two Case Studies

Paul Totten
Retrofitting and Modernization of Existing Structure Using Lessons From Our Past

Sophie Mercier, Hamid Heidarali
A Design Approach to Envelope Remediation of Heritage Buildings : Field Monitoring of Salt Building

12:00 - 13:15	Lunch sponsored by Logix - Insulated Concrete Forms Presentation - Mr. Grant Van Inderstine - Canadian Museum for Human Rights	Grand Ballroom 4th floor Fort Garry Place
13:15 - 14:30	Technical Sessions - Session 5	Crystal Ballroom/ Concert Hall 7th floor

Theory 5 Crystal Ballroom 7th floor
Session chair: Russ Richman

Marysusan Couturier
Dynamic Water Vapor Permeance of Building Materials and the Benefits to Buildings

Marianne Armstrong
Field Thermal Mass Performance of an Insulating Concrete Form (ICF) Wall

Kris Dick
Comparison of Energy Consumption for a Wood Frame Building Using Batt Insulation and a Foil Backed EPS Foam Board

Practice 5 Concert Hall 7th floor
Session chair: Bob Passmore

John Wells
Housing Conditions and Children's Respiratory Health

Wahid Maref
Field Hygrothermal Performance of Retrofitted Wood-Frame Wall Assemblies in Cold Climate

Andy Lang
Analysis of Condensation in Exterior Wall Clad with Pre-Cast Concrete - A Case Study

14:30 - 15:15	Afternoon Refreshment and Trade Show sponsored by Vaproshield Canada ULC	Grand Ballroom 4th floor Fort Garry Place
15:15- 16:30	Technical Sessions - Session 6	Crystal Ballroom/ Concert Hall 7th floor
Theory 6 Session chair: Wahid Maref	Crystal Ballroom 7th floor	Practice 6 Session chair: Rob Rymell
Phalguni Mukhopadhyaya Bio-based Foam Insulation from Sodium Carboxymethylcellulose and Kaolin		Chris Murphy Brave new world: Building Controls in New Zealand 2011
Sudhakar Molleti Temperature Induced Stresses on Mod Bit Low-Slope Roofing Systems		Andy Lang Interpreting the International Building and Residential Codes Requirements for Drainage of Exterior Wall Cladding Systems
Phalguni Mukhopadhyaya Wood Sorption, Capillary Condensation and Their Implications for Building Envelopes of Wood Construction		Steve Ray A Rapid Roof Modeling Tool
16:40 - 17:30	Conference Wrap Up/ Forum	Grand Ballroom 4th floor Fort Garry Place
18:00 - 20:00	Wine and Cheese Reception Tours of Manitoba Hydro Place	Manitoba Hydro Place 360 Portage Avenue Organized transportation from Hotel Fort Garry meet in Lobby at 17:45.

Friday, May 13

7:00 - 9:00	National Council Meeting	Gateway Room mezzanine
8:30 - 11:00	Organized transportation from Hotel Fort Garry	
9:00 - 9:30	Union Bank Tour	Tours are for those who have pre-registered.
10:00 - 10:30	Canadian Museum for Human Rights tour	
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