



Building Envelope Council Ottawa Region

## **A Window of Opportunity: Reducing Fenestration Frustrations - 'Dam' Those Windows**



**A one-day seminar on windows, window performance, interface design and recommended window installation practices; past, present and future.**

**November 9, 2005**

**8:00 AM to 4:10 PM**

**Canada Mortgage and Housing Corporation  
National Office  
Conference Room C1-103 and C1-104  
700 Montreal Road  
Ottawa Ontario**

A one-day seminar for building designers including architects and engineers, builders, contractors, window installers, product manufacturers, specifiers, project managers, building owners, property managers and building operators concerned about the installation performance of windows within the building envelope.

### **About BECOR**

The building Envelope Council Ottawa Region (BECOR) is a non-profit organization formed to promote the pursuit of excellence in the design, construction and performance of building envelopes. BECOR is committed to maintain a leadership position in this highly technical field. Members enjoy advance notice of technical meetings, discounted seminar fees, preferred registration and information packages for special seminars. BECOR, through its affiliations with National Building Envelop Council (NBEC) establishes and maintains communication channels with other related national and provincial organizations.

Visit our Website:  
<http://www.becor.org>

In Collaboration with:

**National Research Council, Institute for Research in Construction  
Canada Mortgage and Housing Corporation  
Public Works Government Services Canada**



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Presents

## A Window of Opportunity: Reducing Fenestration Frustrations - 'Dam' Those Windows

A one-day seminar on windows, window performance, interface design and recommended window installation practices; past, present and future.

Featuring

**Chris Barry** • Pilkington Glass.

**Dr. Michael Lacasse** • National Research Council, Institute for Research in Construction

**Silvio Plescia** • Canada Mortgage and Housing Corporation

**David Kayll** • Morrison Hershfield Limited.

### Speaker Biographies

**Mr. Chris Barry** is currently the Director of Technical Services, Building Products, Pilkington North America Inc., and an active member of IGMA, ASTM and ASHRAE. Chris a graduate from the University College Dublin, Ireland with a Bachelor of Mechanical Engineering, joined Pilkington Glass in Toronto in 1967, where he has since held several positions and responsibilities including:

- the commissioning and development of cutting and wareroom technology for the first two float glass lines in Canada.
- He developed and designed IG fabrication lines.
- General Manager of the GlassCrete Division of Pilkington Glass. He operated the pilot manufacturing plant, designing and producing glass fiber reinforced cement products.
- Technical Manager of the Canadian Glass Division; technical design, fabrication and installation assistance for architectural products with internal and external customers.

Manager of Architectural Technical Services (Toledo); developed technical data bulletins, design guides, standards and training programs.

**Dr. Michael Lacasse** is a materials scientist and building engineer and since 1991 has worked as a research officer at the Institute for Research in Construction. His work focuses on the development of methods to assess the long-term performance of building materials and components and the durability of building envelope assemblies. More recently he has been involved in projects related to the development of methods for evaluating the moisture management of wood-frame wall systems and the wall-window interface.

**Mr. Silvio Plescia** is a Senior Researcher with CMHC's Housing Technology Group, Technical Research Division. Whose interests lie primarily on moisture performance of building envelope systems. He lead several CMHC studies on moisture performance of cladding and wall systems, including "Water Penetration Resistance of Windows". In addition, he currently is responsible for the development of CMHC's Best Practice Guide for Windows.

**Mr. David Kayll**, a building science and building envelope engineer, has over 16 years professional experience including two years in the Ottawa office of Morrison Hershfield and five years in Morrison Hershfields' Vancouver office where he was a registered Building Envelope Professional with APEGBC and senior building envelope engineer on new and rehabilitation construction. David is the author of several papers on the subject building science practice. David has seen many bad window installations and the occasional good one, and has had the professional satisfaction of encouraging good practice in Window Wall design and installation.

## Morning Agenda

- 8:00 – 8:30** Registration – Coffee
- 8:30 – 8:45** Introduction, Welcome & Opening Remarks  
Silvio Plescia, President BECOR
- 8:45 – 10:15** Glass Performance  
Chris Barry, Pilkington Glass
- Glass and Glass Breakage
  - Types of glass
  - Coatings and films
- 10:15 – 10:45** Health Break and Refreshments
- 10:45 – 11:05** Climate and Loads  
Dr. Michael Lacasse
- Wind-driven Rain –
  - Loads for window ratings
- 11:05 – 11:40** Window and Wall Problems  
Silvio Plescia
- Summary of recent studies
    - Wall problems
    - Window problems
  - Current Practices
- 11:40 – 12:00** Performance of Window-Wall Interfaces to Manage Rainwater - Part 1  
Dr. Michael Lacasse
- Laboratory Test Program – Set-up & Interface Details

## Afternoon Agenda

- 12:00 – 1:00** Lunch
- 1:00 – 1:45** Performance of Window-Wall Interfaces to Manage Rainwater – Part 2  
Dr. Michael Lacasse
- Presentation of results from Laboratory testing of Window Interface Details
- 1:45 – 2:30** Window Installations  
Silvio Plescia
- Codes and standards
    - 2005 NBC
    - CSA A440.4
    - ASTM E2112
  - Recommended installation details and practices
  - Certified Window Installers Program?
- 2:30 – 3:00** Coffee / Refreshment Break
- 3:00 – 4:00** Window Wall – Case Study  
David Kayll
- What is Window-wall?
  - Case study of a recent installation of a window-wall system in Ottawa.
  - West Coast details vs. Eastern Canada details.
- 4:00 – 4:10** Closing remarks  
Silvio Plescia

Window manufacturers were recently asked, “What are the three biggest issues (challenges) facing the window industry today?”, The response was unequivocally: Installation, Installation, Installation. In recent studies of moisture problems in exterior wall assemblies, at least 25% of the documented problems were directly attributed to either water penetration through the window or through the window-wall interface or both.

Join us as we explore opportunities to improve the performance of the installed window and window to wall assemblies. We'll look at performance in the context of climate (driving rain) loads and use laboratory testing to quantify water management of current installation practices and improved details. Installation recommendations will be presented. As well, “Window-Wall” systems are proving to be popular in highrise MURB's: What are “Window-Walls”? Find out what works, what doesn't.



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## Registration Form

Name		
Title		
Company		
Address		
City	Province	Postal Code
Telephone	Fax	E-mail

### Registration Information

(Please circle or check-mark appropriate fee level.)

Members

Non-Members

Seminar Fees	<b>\$200 + \$14.00(GST) =\$214.00</b>	<b>\$275+\$19.25 (GST) =\$294.25</b>
Students	<b>\$75+\$5.25 (GST) =\$80.25</b>	<b>\$100+\$7.00 (GST) =\$107.00</b>

**Note: Please Register Early. Registration at the door may be limited by seating capacity.**

*Method of Payment:*

**If Paying by cheque: Complete the Registration form, make cheque payable to BECOR. Mail registration form and cheque to:**

**Tina Bradshaw-Ettinger  
c/o Halsall Associates Limited  
Suite 3001  
210 Gladstone Avenue  
Ottawa, Ontario**

N.B. If paying by cheque, please ensure cheques are received no later than November 4, 2005.
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**If Paying by:**      **VISA**          **or**      **MASTERCARD**   

**The information below must also be completed and this form faxed to Tina Bradshaw-Ettinger at Halsall Associates Limited (613) 237-2935; (Tel: 237-2462 ext. 222)**

Card #: \_\_\_\_\_ Expiry Date: \_\_\_\_\_

Cardholder Name: \_\_\_\_\_

Signature: \_\_\_\_\_

For further information about this seminar, contact Silvio Plescia at (613) 748-4091.