

Improving Energy Performance in the Building Envelope

**For Architects, Engineers,
Specifiers, Contractors,
Building Owners and
Managers, and Building Code
Officials**

**Earn 5 AIA Sustainable Design HSW
Learning Units for Architects**

**AIA Learning Units Qualify for PDH's for
Professional Engineers in New York State, and
May Qualify for PDH's in Other States
Depending on State Licensing Board
Requirements**



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Washington Chapter/AIA
Presents

Improving Energy Performance in the Building Envelope

A Day of Continuing Education

**Delivering Energy Efficient Air and Vapor Barrier Systems
Achieving Energy Efficient Roofing with Building Integrated
Photovoltaics, Green Roofs, and Energy Star Design
Insulated Cladding Solutions for High Performance Buildings
Elements of Commissioning and Testing for High Performance
Building Enclosures**

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Wednesday, March 3, 2010

8:00 AM to 3:00 PM

**Carnegie Endowment for
International Peace
Conference Center
1779 Massachusetts Ave. NW
Washington, DC 20036**

Improving Energy Performance in the Building Envelope

March 3, 2010 – Washington, DC

- 8:00 a.m. Registration**
- 8:30 a.m. Opening Remarks**
- 8:45 a.m. Delivering Energy Efficient Air and Vapor Barrier Systems by Tremco Global Sealants Group**
 - Economic and Environmental Benefits of Air Barrier Systems
 - Impact of Energy Efficiency
 - Functions of an Air Barrier System
 - Control Functions of a Wall
 - Why Managing Air Flow is Critical to Sustainable Design
 - System Components
 - Permeable and Impermeable Systems
 - Contrast Sheet and Fluid Applied Systems
 - Common Design and Construction Issues
 - Specifications
 - Design
 - Sequence of Installation
 - Verification
 - Integrating Windows and Curtain-Walls into an Air Barrier System
- 10:00 a.m. Break**
 - Meet speakers
- 10:15 a.m. Achieving Energy Efficient Roofing with Building Integrated Photovoltaics, Green Roofs, and Energy Star Design by Tremco Roofing Division**
 - Building Integrated Photovoltaics (Solar)
 - Green (Vegetative) Roofs
 - Energy Star/Cool Roofs
 - Environmental Concerns
 - Urban Heat Island & Pollution
 - Energy infrastructure
 - Carbon Impacts
 - Interior comfort
 - Sustainability Impacts
 - Economic Benefits
 - Energy Reduction
 - Storm Water Issues
 - Renewable Energy/RECS
 - Cap and Trade
 - Waste Stream/Roof Life Cycle
 - Impacting building value
 - Major components and functions
 - Energy & Sustainable Focused Roofing Solutions
 - Design Considerations
 - Cost(s), Maintenance, Life Cycle,
 - Legislation Impacts

11:30 a.m.

Lunch

12:15 p.m.

Insulated Cladding Solutions for High Performance Buildings by Dryvit Systems, Inc.

- High Performance Building Envelopes
 - What does it mean?
- The Energy Challenge
 - Governmental Policy
 - Building Influences
- Building Envelope Performance Solutions
 - Managing Air Leakage
 - Air / Weather / Vapor Barriers
 - Testing Compliance
 - Improving Insulation Value
 - Addressing Thermal Bridging
 - Placement / Thickness
 - Energy Code and Climate
 - Moisture Protection
 - Insulated Claddings
 - Systems and Finishes
- Retrofit / Restoration Construction Options
 - EIFS as a Retrofit Cladding
 - Existing EIFS Restoration
- New Wall Assembly Research / Data
 - ORNL Net Facility Study
- Leadership in Energy and Environmental Design
 - Envelope Performance and LEED
 - Building Cost Factors
 - Environmental Impact
 - Life Cycle Analysis

1:30 p.m.

Break

- Meet speakers

1:45 p.m.

Elements of Commissioning and Testing for High Performance Building Enclosures by CanAm Building Envelope Specialists

- Commissioning
 - Architects
 - Contractors
 - Commissioning Agent
- Roof / Wall Intersections
- Empirical Observations
 - Stack Effect
 - Mechanical Venting
 - Wind Effect
- Inspections
 - Roof Inspector
 - Air Barrier Inspector
 - Window Inspector
 - Wall & Ceiling Inspector
 - Sealant/Waterproofing Inspector
- Testing
 - Blower Door Testing
 - Thermography
 - Full Building Testing

3:00 p.m.

Close

Registration

(Continental Breakfast and Lunch Included)
March 3, 2010

AIA Members:

By: February 3, 2010 \$70.00 \$ _____
After: February 3, 2010 \$85.00 \$ _____

Non Members:

By: February 3, 2010 \$90.00 \$ _____
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Cancellation Policy: Please note that there are NO REFUNDS for registration fees under \$30.00. For classes with a registration fee \$30.00 and greater, AIA/DC will keep 10% of the registration fee for participant cancellations made at least ONE WEEK PRIOR to the date of the event. Cancellations made after this time will not be refunded.