

# 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 Approved 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**



**Sponsored by:**  
New York State Society of Professional Engineers, Inc.  
AIA Eastern New York



**AIA Eastern New York**

**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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**Tuesday, April 20, 2010  
7:30 AM to 2:00 PM**

**NYSSPE  
6 Airline Drive  
Albany, NY 12205  
www.nysspe.org**

# Improving Energy Performance in the Building Envelope

April 20, 2010 - Albany

- 7:30 a.m. Registration**
- 8:00 a.m. Opening Remarks**
- 8:15 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
- 9:30 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
- 10:45 a.m. Break**  
Meet speakers

11:00 a.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

12:15 p.m.

## Lunch

12:45 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

2:00 p.m.

## Close

# Registration

(Continental Breakfast and Lunch Included)

Albany Workshop – April 20, 2010

## Seating Is Limited - Please Register Early

### NYSSPE and AIA Members:

By: April 12, 2010      \$100.00      \$ \_\_\_\_\_

### Non-Members:

By: April 12, 2010      \$120.00      \$ \_\_\_\_\_

Name(s): \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

(Please Print) – Confirmation Will Be Sent

Profession: \_\_\_\_\_

Register Online: [www.nysspe.org/calendar.php](http://www.nysspe.org/calendar.php)

### Or: Please Mail Check Payable To:

New York State Society of Professional Engineers  
6 Airline Dr., Albany, NY 12205

Phone: 518/283-7490      Fax: 518/283-7495

E-mail: jamiller@nysspe.org – Jennifer Miller

Or: Master Card/Visa/Amex/Discover#

Address: (if different from above) \_\_\_\_\_

Expiration Date: \_\_\_\_\_

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

**Cancellation Policy:** 100% refund for cancellation made by April 5th. 50% refund for cancellation made by April 12th. No refund for cancellation after that. NO SHOWS WILL STILL HAVE TO PAY.