

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**



Sponsored by
AIA Northeast Illinois
630/527-8550



AIA Northeast Illinois

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**

**Wednesday, March 17, 2010
8:00 AM to 2:45 PM**

**NIU Naperville
Northern Illinois University
1120 East Diehl Road
Naperville, IL 60563**

NOTE: AIA Chicago will be sponsoring the identical workshop on Thursday, March 18th, in Downtown Chicago. You may attend either location at the same rate. For registration details for the AIA Chicago workshop, go to www.aiachicago.org

Improving Energy Performance in the Building Envelope

March 17, 2010 - Naperville

- 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 p.m.

Lunch

12:00 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

1:15 a.m.

Break

Meet speakers

1:30 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

2:45 p.m.

Close

Registration

(Continental Breakfast and Lunch Included)

March 17, 2010

AIA Members :

By: March 4, 2010 \$65.00 \$ _____
After: March 4, 2010 \$85.00 \$ _____

Non Members:

By: March 4, 2010 \$75.00 \$ _____
After: March 4, 2010 \$95.00 \$ _____

Name: _____

Company: _____

Address: _____

Phone: _____ **Fax:** _____

E-mail: _____

Profession: _____

Register online at www.aiane.org

(AIA Chicago members: put "CHI" after your name to be charged the member rate after your registration is received at the AIA Northeast Illinois office)

Or:

Mail Check Payable To:

AIA Northeast Illinois
 412 Green Valley Drive
 Naperville, IL 60540

Phone: 630/527-8550 **Fax:** 630/357-4818

E-mail: corda@aiane.org

Or:

Master Card/Visa/AmEx/Discover#

Expiration Date: _____

Signature _____

Cancellation Policy: 100% refund for cancellation made 14 days or more before event. 50% refund for cancellation made less than 14 days before event. No refund for cancellation made 7 days or less before the event.