

Greater St. Louis Chapter CSI  
% Jan Patrick  
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St. Louis, MO 63119

Greater St. Louis Chapter CSI – Improving Energy Performance in the Building Envelope

# 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 May Qualify for PDH's for Engineers Depending on State Licensing Board Requirements**



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# Greater St. Louis Chapter CSI

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**

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

*AIA Learning Units  
May Qualify for PDH's for Engineers  
Depending on State Licensing Board Requirements*

**Wednesday, October 28, 2009**

**7:30 AM to 2:00 PM**

**Alberici**

**8800 Page Avenue  
St. Louis, MO 63114**

Thanks to Alberici for hosting  
the meeting location.

# Improving Energy Performance in the Building Envelope

October 28, 2009 – St. Louis

- 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 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)  
October 28, 2009

**By:** October 14, 2009      \$75.00      \$ \_\_\_\_\_

**After:** October 14, 2009      \$100.00      \$ \_\_\_\_\_

**Name:** \_\_\_\_\_

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

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

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

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

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

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**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.