

AIA Pittsburgh
945 Liberty Avenue
Loft #3
Pittsburgh, PA 15222

AIA Pittsburgh – Preventing Moisture, Air, and Vapor in the Building Envelope

Preventing Moisture, Air, and Vapor in the Building Envelope

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

**Earn 5 AIA Approved HSW
Learning Units for Architects**

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



Sponsored by
AIA Pittsburgh
412/471-9548



AIA Pittsburgh

Presents

Preventing Moisture, Air, and Vapor in the Building Envelope

A Day of Continuing Education

**Causes and Solutions for Water and Vapor Transmission
in Concrete Slabs
Critical Roofing Details to Prevent Moisture Intrusion
Sealants and Adhesives for Prevention of Air and
Water Infiltration
The Role of Air Barriers in Cavity Wall Construction**

*Earn 5 AIA Approved HSW
Learning Units for Architects*

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

Wednesday, November 29, 2006

**8:00 AM to 2:45 PM
Engineer's Society of Western PA
337 Fourth Avenue
Pittsburgh, PA 15222
412/261-0710**

Preventing Moisture, Air, and Vapor in the Building Envelope

November 29, 2006 – Pittsburgh

- 3:00 a.m. Registration**
- 3:30 a.m. Opening Remarks**
- 3:45 a.m. The Role of Air Barriers in Cavity Wall Construction by PROSOCO Incorporated**
 The basics of air barrier design
 9 points to remember about air barriers
 Damage caused by uncontrolled air movement
 Air movement through wall assemblies
 Liquid water vs. condensation
 Mold and deterioration
 Air barriers and energy efficiency
 Energy savings
 LEED certification points
 Vapor barriers vs. air barriers
 Diffusion
 Permeable vs. impermeable
 Building codes and moisture in walls
 Managing liquid water
 Managing water vapor
 Air barriers in construction
 Air barrier types
 Checkpoints for effectiveness
 Fluid-applied vs. fabric wraps
 Water-based vs. asphaltic
 Cost comparisons
- 10:00 a.m. Break**
 Meet speakers
- 10:15 a.m. Sealants & Adhesives for Prevention of Air & Water Infiltration by May National**
 Sealant Failures and Resulting Problems
 Water intrusion, mold, energy inefficiency
 Sealant Failures: Causes
 Improper sealant selection
 Improper installation
 Types of failure
 Investigation of remedial case studies
 Specifying and Installing Sealants Properly Based on Project Type
 Joint movement expectations
 Urethane or silicone
 Structural, glazing, weatherseals
 Test Methods for evaluating and specifying sealants
 Sealant installation procedure
 Products and details used with Sealants for Preventing Air and Water Infiltration
 Vapor and air barriers, flashing, drainage, rain screens and pressure equalization

11:30 a.m.

Lunch

12:15 p.m.

Causes and Solutions for Water Vapor Transmission in Concrete Slabs by Dayton Superior Corporation

- Description of Problem
 Alkalinity, re-emulsification of adhesives, mold and mildew, corrosion issues
- Understanding Causes
 Understanding issues around closed and open slabs, where moisture comes from, mix design in concrete slabs, absorptive aggregate in light-weight concrete
- Effect on:
 Adhesion of low perm floor covering
 Reinforcing steel and post tension cables
 Warping on wood floors
 Fluid applied coatings
- Evaluation
 Understanding existing conditions, site survey, various tests
- Solutions
 Discussion for on grade slab vapor barriers
- Review of solutions for elevated pan slabs
- Understanding solutions with breathable finishes

1:30 p.m.

Critical Roofing Details to Prevent Moisture Intrusion by GenFlex Roofing Systems

- Moisture Intrusion
 Common problems that can be prevented with proper understanding and design
- Critical Roof Details
 Prevent moisture infiltration in both horizontal and vertical applications.
- Application
 Critical details for membrane systems and how to inspect for compliance
- Designing for High Winds
 How to keep high winds in check and moisture out of your building through proper edge design
- Model Building Codes
 Edge Metal requirements to meet Building Codes
- Products and Performance
 Designing for high performance roofing systems that incorporate proper membranes, systems and edge design

2:45 p.m.

Close

Registration

(Continental Breakfast and Lunch Included)

November 29, 2006

AIA and CSI Members:

By: November 17, 2006 \$100.00 \$ _____
 After: November 17, 2006 \$125.00 \$ _____

Non-Members:

By: November 17, 2006 \$125.00 \$ _____
 After: November 17, 2006 \$150.00 \$ _____

Name(s): _____

Company: _____

Address: _____

Phone: _____ Fax: _____

E-mail: _____

Profession: _____

Please Send Check To:

945 Liberty Avenue
 Loft #3
 Pittsburgh, PA 15222

Phone: 412/471-9548 Fax: 412/471-9501

E-mail: info@aiapgh.org

Or:
 Master Card/Visa/ # _____

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.