

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**



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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
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Depending on State Licensing Board
Requirements*

Date and Location

Tuesday, June 27, 2006

8:00 AM to 2:45 PM

Regional Planning Commission

1731 1st Avenue North

Birmingham, AL 35203

205/251-8139

Preventing Moisture, Air, and Vapor in the Building Envelope

June 27, 2006 – Birmingham, AL

- 8:00 a.m. Registration**
- 8:30 a.m. Opening Remarks**
- 8:45 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
- 10:00 a.m. Break**
- Meet speakers
- 10:15 a.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
 - What location, pro and con
 - Review of solutions for elevated pan slabs
 - Understanding solutions with breathable finishes

11:30 a.m.

Lunch

12:15 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

1:30 p.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

2:45 p.m.

Close

Registration

(Lunch Included)

June 27, 2006

AIA Members: \$ 50.00 \$ _____

AIA Associate Members: \$ 25.00 \$ _____

Non-Members: \$ 75.00 \$ _____

Name(s): _____

Company: _____

Address: _____

Phone: _____ **Fax:** _____

E-mail: _____

(Please Print)

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.