

# Sustainable and Energy Efficient Building Envelope Design and Construction

**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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# AIA Birmingham

Presents

## Sustainable and Energy Efficient Building Envelope Design and Construction

*A Day of Continuing Education*

**Masonry Walls and Concrete Floors in Sustainable Design  
Insulated Wall Claddings for Sustainable and Energy  
Efficient Design  
Greenroofs: Achieving Sustainable Results  
Steel Thermal Efficient Panels for Sustainable Design**

*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*

**Date and Location**

**Tuesday, September 9, 2008  
8:15 AM to 2:45 PM**

**Alagasco Midtown Business Center  
20 South 20<sup>th</sup> Street  
Birmingham, AL 35233**

# Sustainable and Energy Efficient Building Envelope Design and Construction

September 9, 2008 – Birmingham

- 8:15 a.m. Registration**
- 8:30 a.m. Opening Remarks**
- 8:45 a.m. Masonry Walls and Concrete Floors in Sustainable Design by PROSOCO, Inc.**
  - Energy efficient masonry design
  - Embodied energy
  - Reduce waste
  - Increase service life
  - Building image
  - Improve indoor air quality
  - Reduce maintenance
  - Eliminate mold and mildew
  - Improving the appearance and performance of concrete floors
    - Reduce Waste
    - Increase service life
    - Improve light reflectance
    - Improve indoor air quality
    - Reduce maintenance
    - Simplify sterilization
    - Color and decoration
- 10:00 a.m. Break**
  - Meet speakers
- 10:15 a.m. Insulated Wall Claddings for Sustainable and Energy Efficient Design by Dryvit Systems, Inc.**
  - The New Overriding Design Goal
    - Reduce Environmental Impact
    - Increase Economic Benefit
  - Defining Sustainable Design
    - Glossary of Terms
    - The True Measurement
  - Insulated Claddings (EIFS) - How Do They Fit?
    - EIFS Systems and Finish Options
  - Cost Factors of Construction and Use
    - Construction Cost
      - Building Aesthetics
      - Value Engineering
      - Maintaining Quality / Performance
    - Operating Cost
      - HVAC and Maintenance
      - Lifetime of the Building
      - Energy Conservation
    - Environmental Cost
      - Total Carbon Footprint
      - Product Life Cycle Analysis
      - Re-Use / Renovation / Recycle
  - The Total Environmental Impact

11:30 p.m.

Lunch

12:15 p.m.

## Greenroofs: Achieving Sustainable Results by Tremco Group

- Greenroof Introduction
  - Design Types - Intensive / Extensive / Semi-Intensive
  - Environmental Concerns
    - Stormwater
    - Energy
    - Health & Productivity Impacts
    - Urban Heat Island & Pollution
    - Waste stream Impacts
  - Economic Benefits
    - Energy Reduction
    - Sustainable Construction
    - Increased Roof Life Cycle
    - Public Relations & Marketing
    - LEED
  - Major components and functions
    - Roofing through Vegetation
  - Design Considerations
    - Case study lessons

1:30 p.m.

## Steel Thermal Efficient Panels for Sustainable Design by Accelerated Building Technologies, LLC

- Construction trends in wall systems
  - Panelized systems
- Materials discussion
  - Steel
  - EPS
- Introduction to steel thermal efficient panels
  - Fusion process
- Understanding the energy efficiency of a wall system
  - R-value & framing effect
  - Air infiltration
  - Moisture permeability
- Efficiency in the construction cycle though STEP
  - Labor
  - Time
  - Material waste
- Improving design flexibility and capability
  - Noise, HVAC & exterior finish considerations
  - Structural and non-structural capability
- LEED qualifications and standards

2:45 p.m.

Close

## Registration

(Continental Breakfast and Lunch Included)  
September 9, 2008

<b>AIA Members:</b>	\$70.00	\$ _____
<b>Interns:</b>	\$50.00	\$ _____
<b>Non-Members:</b>	\$100.00	\$ _____

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

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

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

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

**E-mail:** \_\_\_\_\_  
(Please Print)

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

### Please Mail Check Payable To:

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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.