

Agenda

Introduction to Green Infrastructure Practices for the Building Envelope

- Goals of Green Infrastructure
 - Benefits and realized performance
 - Definitions and terms overview for this seminar
- Application and benefits of:
 - Vegetated green Roofs
 - Blue roofs
 - Living walls
 - Rainwater retention systems
 - Benefit of connecting to on-grade green Infrastructure systems
- Typical design and components
 - Plants, engineered soils, drainage components and accessories

Monetizing the Benefits of Green Infrastructure for the Building Envelope – Part 1

- Stormwater management
 - Monetization methods and means
 - Clean Water Act and implication of upcoming site run-off reduction standards
 - Macro and micro influences leading to demand for change
 - Unfolding monetary opportunities with increasing regulatory pressure
 - Green infrastructure applications for the building envelope leading to stormwater management
 - Run-off retention and reduction strategies
 - Water quality benefits and value to building owners
- Energy spend reduction and conservation
- Regional and seasonal benefits
- Mechanical equipment savings due to reduced use added longevity

Monetizing the Benefits of Green Infrastructure for the Building Envelope – Part 2

- Urban Ecology
 - Environmental value of green Infrastructure
 - Heat island effect mitigation, pollution control, CO2 sequestration
 - As part of smart city strategies
 - Ecosystem services evaluations
 - Value of recreating natural systems
 - Rooftop farming and urban agriculture
 - Revenue generation
 - Crops, events,
 - Food desert relief and social equality
 - Improved tangible real estate value
- Social Interaction
 - Amenities packages

The Reversal of All Gains: Failures and Remediation

- Case studies of vegetated green roof and living roof failures
 - Typical points of technical failure
 - Failure due to design, installation and maintenance errors
 - Remediation and renovation costs
- Strategies to avoid failure
 - Design considerations
 - Effective planning
 - Maintenance
- Formulas for success
 - Design considerations
 - Site specific maintenance

The Social and Human Element

- The Biophilic Effect
 - Nature and human development
 - Urban nature and human health and well-being
- Design considerations for incorporation of green infrastructure to facilitate human engagement
 - Healthcare, educational municipal facilities

Proving Asset Value Gains, Part 1

- The value of certification
 - LEED, SITES, Living building challenge
- Green infrastructure value creation ROI
 - Short term vs long term evaluation
 - Where and how the money is found
 - Costs and correct monetizing of benefits
- Long term value generation
 - The Permaculture Lens

Proving Asset Value Gains, Part 2

- Current financing strategies
- ROI case studies:
 - Stormwater management, energy conservation & increased real estate assessment
- Exercise: The Green Infrastructure Scorecard
- Example: Addition of vegetated green roof to an existing building
 - The 7th generation benefit

Building Envelope Performance: Increasing Value with Green Infrastructure

Atlanta, GA - Thursday, September 20, 2018



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Learning Objectives

You'll be able to:

Explore applications for and benefits of vegetated roofs, blue roofs, living walls and rainwater retention systems.

Monetize the benefits of green infrastructure for building envelopes.

Prevent problems in green infrastructure by using good design, workmanship and maintenance.

Experience the biophilic effect of green infrastructure.

Obtain green certifications and review case studies that quantify asset value gains.



Building Envelope Performance: Increasing Value with Green Infrastructure

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Evaluate the benefits of vegetated roofs, blue roofs, living walls and rainwater retention systems

Monetize the benefits of green infrastructure for building envelopes

Maintain system performance with proper design, workmanship and maintenance

Obtain green certifications and experience the biophilic benefits of green infrastructure

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Mary Ann Uhlmann *Urban Horticulture Consulting, LLC*

Ms. Uhlmann is an environmental horticulturist, accredited green roof professional, certified permaculture practitioner and certified sustainable landscape professional. Her firm, Urban Horticulture Consulting, provides green infrastructure planning, training and asset management. Over the past 19 years, she has been a passionate advocate for green infrastructure education and policy making. Based in Marietta, Georgia, her projects include green roof design, assessments and remediation, maintenance protocol development; FLL compliance testing and the development of public outreach programs. Recent speaking engagements include The Little Rock Sustainability Conference, P80 Global Summit and The Green Infrastructure Foundation Seattle Design Charette.

Joanne Rodriguez *GreenStructure, Ltd.*

Ms. Rodriguez is a LEED AP, CRPL climate leader, certified permaculture practitioner and green infrastructure specialist. With over 30 years experience in the building products industry, she is the founder of GreenStructures, a multidisciplinary environmental consulting firm. Her efforts are concentrated in the development of training and public outreach in the areas of climate mitigation, resiliency and green infrastructure practices. Former director of sustainability for Tremco Roofing, Ms. Rodriguez has provided leadership on many high-profile green roof projects across North America. Her recent speaking engagements include keynote speaker at The Virtual Green Roof & Wall Summit, and presenter at the National Roofing Contractor Association Sustainability webinar series and the Green Infrastructure Foundation Seattle Design Charette.

Seminar Information

Embassy Suites - Galleria

2815 Akers Mill Road SE
Atlanta, GA 30339
(770) 984-9300

Tuition

\$279 for individual registration
\$259 for three or more registrations.

Each registration includes a complimentary continental breakfast and printed seminar manual.

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Cancellations: Cancel at least 48 hours before the start of the seminar, and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another seminar or the CD/manual package. You may also send another person to take your place.

Can't Attend? Order the CD/Manual Package:

An audio recording of this seminar is available for \$289 (including shipping). Allow five weeks from the seminar date for delivery. Please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

Continuing Education Credit Information

This seminar is open to the public and offers 6.0 PDHs to Georgia professional engineers and 6.0 Public Protection PDU's to Georgia architects. Educators and courses are not subject to preapproval in Georgia.

This seminar is approved by the American Institute of Architects for 6.0 Learning Units (Provider No. J885). Only full attendance can be reported to the AIA/CES.

Architects and engineers seeking continuing education credit in other states will be able to apply the hours earned at this seminar. HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana, Maryland, New Jersey (Approval No. 24GP00000700), New York (NYSED Sponsor No. 35), North Carolina, and North Dakota. HalfMoon Education is deemed an approved architect continuing education sponsor in New York.

This course offers a non-credit continuing education opportunity to construction contractors. It has not been approved by any contractor licensing board for mandatory continuing education.

Attendance will be monitored, and attendance certificates will be available after the seminar for most individuals who complete the entire event. Attendance certificates not available at the seminar will be mailed to participants within fifteen business days.

Additional Learning

Webinar Series

Community Solar and Rooftop Solar

- **Community Solar**
Wed., Sept. 5, 2018, 11:00 AM - 2:15 PM CDT
- **Design Your Solar Roof**
Thurs., Sept. 6, 2018, 11:00 AM - 2:15 PM CDT

Seismic Design and Construction

- **Seismology and Building Codes**
Wed., Sept. 12, 2018, 11:00 AM - 3:30 PM CDT
- **Seismic Design of Building Structures**
Thurs., Sept. 13, 2018, 11:00 AM - 3:30 PM CDT

Small Wind Energy Systems

- **Small Wind Energy System Components**
Thurs., Sept. 20, 2018, 11:00 AM - 1:00 PM CDT
- **Small Wind Energy Siting and Sizing**
Fri., Sept. 21, 2018, 11:00 AM - 1:00 PM CDT

International Green Construction Code

- **Introduction to the International Green Construction Code (IgCC)**
Thurs., Sept. 20, 2018, 11:00 AM - 12:30 PM CDT
- **Chapters 4-5: Site Development and Material Use**
Thurs., Sept. 20, 2018, 1:00 - 2:30 PM CDT
- **Chapters 6-9: Energy, Water, Environmental Quality and Building Commissioning**
Fri., Sept. 21, 2018, 11:00 AM - 12:30 PM CDT
- **Chapters 10-11: Existing Buildings**
Fri., Sept. 21, 2018, 1:00 - 2:30 PM CDT

For more information visit:
www.halfmoonseminars.org/webinars/

Registration

Building Envelope Performance:

Increasing Value with Green Infrastructure

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