

Agenda

Energy-Efficient Building Envelope as Part of a Whole Building Approach

M.Hazelwood

- Integrating the building envelope with other building systems
- Design considerations
 - Siting and orientation
 - Mechanical and plumbing
 - Electrical and renewable energy systems
- Performance goals
- Occupancy and use
- Energy modeling process to quantify energy savings

Energy Standards, Codes, Incentives and Efficiency Designations

M. Hazelwood

- IECC 2021
 - Requirements
 - Compliance
- Tax and utility incentives
- Energy-efficiency certifications

Creating and Maintaining the Four Critical Barriers and Wall Systems

A.Verley

- Waterproofing and flow control
- Vapor retarders and moisture control
- Heat transfer principles and thermal performance
- Air barriers and air leakage
- Insulation and thermal bridging
- Mass walls and passive strategies

Designing and Building Energy-Efficient Foundation Systems

H. Holdridge

- Coordinating foundation system functions
- Building materials and construction processes
- Foundations, slabs and basements

Designing and Installing Efficient Fenestration Systems

M. Hazelwood

- Fenestration characteristics and parameters affecting energy efficiency
- Selection of window systems for energy efficiency
- Coordinating window and door locations in the envelope to maximize performance
- Curtain walls/skylights and sloped glazing

Designing Energy-Efficient Roofing Systems

A.Verley

- Determining insulation level for roofs
- Working with low-slope roofs
- Metal-panel roofs and steep-slope roofs
- Green roofs and “cool” roofs
- Energy code provisions for roofing systems

High-Performance Building Envelope Design and Construction

Live, Interactive Webinar - Monday, July 29, 2024

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Learning Objectives

You'll be able to:

Consider how the building envelope works with mechanical and electrical systems to improve energy efficiency.

Comply with building codes and energy standards and work toward energy-efficiency certifications.

Prevent air leakage and heat transfer, and control moisture and vapor movement.

Design and construct energy-efficient foundation systems.

Discuss energy-efficient fenestration and roofing systems.

HalfMoon Education Inc.,
Your LIVE Education Leader Presents

High-Performance Building Envelope Design and Construction

Live, Interactive Webinar - Monday, July 29, 2024



Integrate building envelope strategy with other energy-efficiency measures

Comply with energy standards and building codes and obtain tax and utility incentives

Design envelopes that create water-resistive barriers, air barriers, vapor retarders and thermal barriers

Design and install energy-efficient foundation, fenestration and roofing systems

Continuing Education Credits

Professional Engineers

6.5 PDHs

Architects

6.5 HSW CE Hours
6.5 AIA LU | HSW

International Code Council

.65 CEUs (Building)

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Webinar Information

Online - Monday, July 29, 2024	
Log into Webinar 8:00 - 8:30 am CDT	Break 12:00 - 12:30 pm CDT
Morning Session 8:30 am - 12:00 pm CDT	Afternoon Session 12:30 - 4:00 pm CDT

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Faculty

Marcus Hazelwood
Certified Energy Manager at Hazelwood Enterprises
Mr. Hazelwood is an energy engineering professional with over 15 years of experience. He is a certified energy manager (CEM) and a LEED-accredited professional (LEED AP), currently serving as project manager with WB Engineers + Consultants where he spearheads and executes energy management, analysis and decarbonization for company clients across 12 offices in the US. Mr. Hazelwood has developed a deep understanding of energy and sustainability best practices, and has extensive experience in energy auditing, energy efficient design and implementation, sustainability planning, and renewable energy project development. In addition to his professional experience, Mr. Hazelwood holds a bachelor's degree in Environmental Studies from Harvard University. He is also a member of professional organizations, including the Association of Energy Engineers, the US Green Building Council (USGBC), the Green Building Institute (GBI), and he served as an instructor at Endicott College teaching green building to architectural graduate students for three consecutive years. Mr. Hazelwood is passionate about energy efficiency and sustainability in the built environment.

Allison Verley
Building Envelope Specialist, Engineer with Construction Innovations Co, Inc.
Ms. Verley is a building envelope specialist with Construction Innovations Co, Inc. She believes knowledge is power and there is always a solution for every situation. With a focus on sustainability, longevity and energy efficiency she stays up to date on the most innovative solutions for the building envelope. Through public speaking, digital media and articles Ms. Verley is able to bring the forefront of information to local markets with a focus on proper use of materials situationally rather than a cookie-cutter approach. Her building envelope focus includes masonry restoration and moisture management, waterproofing, roofing, single-ply and protected membranes, garden roofs, and assembly solutions. Ms. Verley earned her undergraduate degree in Civil Engineering.

Heather Holdridge EIT
Associate AIA LEED Fellow, Sustainability Director at Lake|Flato
Ms. Holdridge, LEED fellow, EIT, associate AIA is the sustainability director at Lake|Flato Architects. Leveraging her background in mechanical engineering, Ms. Holdridge directs all Lake|Flato teams in establishing sustainability goals. She devises strategies and systems to realize those goals under programs such as LEED, the 2030 Challenge, and the Living Building Challenge. Ms. Holdridge works closely with teams to evaluate passive systems and performs energy modeling throughout the design process. She received a bachelor of science degree in Mechanical Engineering from The University of Texas at Austin and a master of Business Administration degree from The University of Texas at San Antonio.

Credit Information

This webinar is open to the public and is designed to qualify for 6.5 PDHs for professional engineers and 6.5 HSW continuing education hours for licensed architects in all states that allow this learning method. Please refer to specific state rules to determine eligibility.

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The American Institute of Architects Continuing Education System has approved this course for 6.5 LU|HSWs (Sponsor No. J885). Only full participation is reportable to the AIA/CES.

The International Code Council has approved this event for .65 CEUs in the specialty area of Building (Preferred Provider No. 1232).

Attendance will be monitored, and attendance certificates will be available after the webinar for those who attend the entire course and score a minimum 80% on the quiz that follows the course (multiple attempts allowed).

On-Demand Credits
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6.5 HSW LUs (AIA)

Additional Learning

- Brownfields Assessments, Grants and Redevelopment Opportunities**
- Tuesday, June 25, 2024 | 10:00 am - 12:00 pm CDT
- All About Interior Building Finishes**
- Thursday, June 27, 2024 | 9:00 am - 4:00 pm CDT
- Green Building Materials and Certifications**
- Friday, June 28, 2024 | 8:30 am - 3:50 pm CDT

AIA Contract Document Workshop
- Monday, July 1, 2024 | 8:30 am - 4:30 pm CDT

Sustainable Site Design
- Monday, July 1, 2024 | 8:30 am - 4:30 pm CDT

National Electrical Code 2023: Grounding and Bonding
- Thursday, July 11, 2024 | 9:00 am - 5:00 pm CDT

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