Agenda

Presented by Jason Morosko, MSME, CPHC

Understanding the Energy Efficiency of Conventional Construction
- Conventional residential energy use
- History of energy conserving residential construction
- Energy conservation incentives
- Current weatherization tactics

Passive House Standard: Purpose, Principles and Development
- History of certifying agencies in US: PHI and PHIUS
- Passive House Standard: voluntary performance-based building envelope energy standard
- Passive House energy calculations
- Energy calculation tools: an introduction to tools and their functionality
- Assembling a team to ensure quality and performance
- Examining common design features of Passive Houses

Elements of Passive House Design
- Siting, sizing and orientation
- Super-insulated envelope with minimized thermal bridging
- Efficient mechanical ventilation
- Ultra-efficient lights, fixtures and appliances- plug loads
- Summer shading and cooling strategies
- Winter solar gain and heat retention strategies
- Integrating renewable energy technologies

Mechanical Systems in Passive House
- Heat exchangers
- Supplemental space conditioning for micro loads
- Renewable energy system integration

Evaluating Passive House Case Studies
- Adapting Passive House for local climate
- Case studies: in the planning process, under construction and finished projects

Learning Objectives

You’ll be able to:

Describe the purpose and principles of the Passive House standard.

Identify common design features of Passive Houses.

Explore architectural elements of Passive Houses, including sizing, orientation, super-insulated envelopes, and efficient ventilation.

Discuss summer shading and cooling strategies, and identify solar gain and heat retention strategies.

Describe mechanical and electrical systems in Passive Houses.

Integrate renewable energy technologies into Passive House design.

Can’t Attend? Order the Manual and Audio from the Live Seminar as a Self-Study Package!

Audio recordings of this seminar are available for purchase starting at $269. See registration panel for more information and please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

Passive House: Planning and Design
Fort Washington, PA - Thursday, February 20, 2020

Understand the purpose, principles, and development of the Passive House Standard

Explore elements of Passive House design

Analyze the energy efficiency of conventional construction

Professional Engineers
- 6.5 PDHs

Architects
- 6.5 HSW Continuing Ed. Hours

Contractors
- Non-Credit Continuing Ed.
Additional Learning

Webinar Series
Commercial Solar Peaker Batteries
• Part I
  Wed., Feb. 5, 2020, 11:00 AM - 12:30 PM CST
• Part II
  Thurs., Feb. 6, 2020, 8:30 - 10:00 AM CST

Pumping and Piping Systems
• Introduction to Pumps: Operation, Principles and Calculations
  Thurs., Feb. 6, 2020, 11:00 AM - 1:00 PM CST
• Piping Design Standards and Codes
  Thurs., Feb. 6, 2020, 1:30 - 2:30 PM CST
• Piping System Components, Materials and Calculations
  Fri., Feb. 7, 2020, 11:00 AM - 1:00 PM CST
• Handling Pump and Piping System Problems
  Fri., Feb. 7, 2020, 1:30 - 2:30 PM CST

Pavement Design
• Principles of Pavement Design
  Wed., Feb. 12, 2020, 11:00 AM - 12:00 PM CST
• Flexible Pavement Design
  Wed., Feb. 12, 2020, 12:30 - 2:30 PM CST
• Rigid Pavement Design
  Thurs., Feb. 13, 2020, 11:00 AM - 1:00 PM CST
• Maintenance, Rehabilitation and Sustainability of Pavements
  Thurs., Feb. 13, 2020, 1:30 - 3:30 PM CST

Ethical Issues for Engineers
• Resolving Disputes and Handling Ethical Issues in Government Projects
  Fri., Jan. 31, 2020, 12:00 - 3:00 PM CST
• Complying with Rules of Professional Conduct
  Fri., Feb. 14, 2020, 12:00 - 1:00 PM CST
For more information and other online learning opportunities visit: www.halfmoonseminars.org/webinars/

Tuition
$289 for individual registration
$269 for three or more simultaneous registrations.

Continuing Education Credit Information
This seminar is open to the public and offers 6.5 PDHs to professional engineers and 6.5 continuing education hours to architects in all states with continuing education requirements.

This seminar is approved by the American Institute of Architects Continuing Education System for 6.5 LU|HSW (Sponsor No. 1128R). Only full attendance is reportable to the AIA/CES. Visit www.halfmoonseminars.org for complete AIA/CES information under this course listing.
HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana (License No. CE21000059), Maryland, New Jersey (Approval No. 24GP00000700), North Carolina, and North Dakota. HalfMoon Education is deemed an approved continuing education sponsor for New York engineers and architects.

The Passive House Institute US has approved this course for 6.5 CEUs.

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

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Registration
Passive House: Planning and Design
Fort Washington, PA - Thursday, February 20, 2020

How to Register
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Fax: 715-835-6066

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Complete the entire form. Attach duplicates if necessary.

Tuition

| I plan to attend the live seminar. Single Registrant | $289.00 | I want to send the self-study seminar: | $289.00 | Digital MP3 Audio/PDF Manual | $269.00 |
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