Learning Objectives

You’ll be able to:

Explain the history of energy-conserving residential construction, and explore the development of the Passive House Standard.

Understand the requirements of Passive House, a voluntary performance-based building envelope energy standard.

Discuss energy calculation tools and review design features common to Passive Houses.

Integrate renewable energy technologies into your Passive House design.

Evaluate mechanical systems, including heat exchangers.

Adapt Passive House for local climates.

Passive House: Planning and Design

Somerset, NJ - Friday, April 27, 2018

Understanding the Energy Efficiency of Conventional Construction

Facts and figures on residential energy use

History of energy-conserving residential construction

Building code requirements

Energy conservation incentives

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

Energy calculations: how and when to perform them 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

Architectural Elements of Passive Houses

Siting, sizing and orientation

Super-insulated envelope with minimized thermal bridging Efficient ventilation

Ultra-efficient lights, fixtures and appliances

Summer shading and cooling strategies

Winter solar gain and heat retention strategies

Integrating renewable energy technologies

Mechanical Systems in Passive Houses

Optimizing heat gains

- Passive solar heat gains

- Indoor environmental heat gains

Heat exchanger

Supplemental heating

Renewable energy system integration

Energy-efficient appliances

Evaluating Passive House Case Studies

Adapting Passive House for the Midwest

Case studies: in the planning process, under construction and finished projects

Understand the energy efficiency of conventional construction

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

Identify elements of Passive House design

Discuss case studies that illustrate the planning process, construction techniques and finished projects
Darren Macri  

Over the last decade, Mr. Macri has been homebuilding and renovating projects consisting of multi-family condo conversions and single family townhouses. He is the proud builder of New Jersey’s First Certified Passive House at 0.29 AHIcn50. Mr. Macri was selected to share his Passive House knowledge and hands-on experience as a presenter at the North American Passive House Conference in Vancouver. He has also taught numerous continuing education classes and Passive House 101 Seminars. Bleu Nest seeks to liberate people from the “average home building standard” by injecting high-performance Passive House know-how into their projects and out into the world so that we may all MAKE AVERAGE THE ENEMY and BUILD BETTER.

Webinar Series

Solar Photovoltaic: Project Design and Development  
  Wed., Mar. 7, 2018, 11:00 AM - 2:15 PM CST
- Solar Photovoltaic: Project Design and Development, Part II  
  Thurs., Mar. 8, 2018, 11:00 AM - 2:15 PM CST

Deep Excavations  
- Introduction to Deep Excavations  
  Thurs., Mar. 15, 2018, 11:00 AM - 1:00 PM CST
- Soil Mechanics, Cantilever Walls and Anchored Sheet Pile Walls  
  Thurs., Mar. 15, 2018, 1:00 - 3:00 PM CST
- Braced Excavation Design  
  Fri., Mar. 16, 2018, 11:00 AM - 1:30 PM CST
- ASO and LBFSD Design  
  Fri., Mar. 16, 2018, 1:00 - 2:30 PM CST

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

HEC-RAS  
- Hydraulic Principles and Applications  
  Thurs., Mar. 22, 2018, 11:00 AM - 1:00 PM CST
- Working with the HEC-RAS User Interface  
  Thurs., Mar. 22, 2018, 1:30 - 3:00 PM CST
- Water Surface Profiling  
  Fri., Mar. 23, 2018, 11:00 AM - 1:00 PM CST
- Steady Flow Surface Profile Demonstrations  
  Fri., Mar. 23, 2018, 1:30 - 3:00 PM CST

Commercial Energy Conservation Code  
- Commercial Energy Conservation Code and COMcheck introduction  
  Wed., Mar. 28, 2018, 11:00 AM - 1:00 PM CST
- Building Envelope Efficiency  
  Weds., Mar. 28, 2018, 1:30 - 5:30 PM CST
- Heating, Ventilation and Air Conditioning Systems  
  Thurs., Mar. 29, 2018, 11:00 AM - 1:00 PM CST
- Service Water Heating, Power and Lighting  
  Thurs., Mar. 29, 2018, 1:30 - 3:00 PM CST

Registration

Passive House: Planning and Design  
Somerston, NJ - April 27, 2018

How to Register  
Online:  
www.halfmoonseminars.org

Phone:  
715-835-5900

Fax:  
715-835-6066

Mail:  
HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278

Complete the entire form. Attach duplicates if necessary.

Tuition

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

Receive a reduced tuition rate of $191 by registering to be our on-site coordinator for the day. For availability and a job description, go online to www.halfmoonseminars.org.

How to Register

Visit us online at www.halfmoonseminars.org  
Mail-in or fax the attached form to 715-835-6066  
Call customer service at 715-835-5900

Cancellations: Cancel at least 48 hours before the start of the seminar, and receive a full tuition refund, minus a $19 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.

Continuing Education Credit Information

This seminar is open to the public and offers up to 6.5 CPC/PDHs to professional engineers and 6.5 HSWS continuing education hours to architects in all states, except Florida architects. HalfMoon Education is an approved continuing education provider for New Jersey engineers (Approval No. 2JPG0000700). This event has been approved by the American Institute of Architects for 6.5 Learning Units (Sponsor No. 1385). Courses approved by the AIA qualify for New Jersey architects. Only full attendance can be reported to the AIA/CES.

HalfMoon Education is deemed an approved architect continuing education sponsor in Florida. HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana, Louisiana, Maryland, New York (NYSED Sponsor No. 35), North Carolina, and North Dakota. This seminar also offers a non-credit continuing education opportunity to contractors; it has not been approved in any state that has a contractor continuing education requirement.

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.

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.

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