

Agenda

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

Can't Attend? Order the Manual and the 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
Arlington, TX - Tuesday, June 25, 2019

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PO Box 278
Altoona, WI 54720-0278



Learning Objectives

You'll be able to:

Study the energy efficiency of conventional construction.

Explore the purpose, principles and development of the Passive House Standard.

Discuss common design features of Passive Houses.

Examine architectural elements and mechanical systems in Passive Houses.

Review case studies and learn how to adapt Passive House for the Southwest.



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Continuing Education Credits

Professional Engineers

6.5 PDHs

Contractors

Non-Credit Continuing Ed.

Architects

6.5 HSW CEPHs/CE Hours

(Including 1.0 Sustainable Design Hour)

6.5 AIA HSW Learning Units



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Faculty

Roger Taylor *Owner of DwellGreen of Dallas, TX*
Mr. Taylor is a Certified Passive House Consultant and Passive House Rater. He is a HERS Rater, and is certified by Energy Star, DOE Zero Energy Ready Home, IECC and BPI. Mr. Taylor has served on the ANSI/RESNET National Committee for water efficiency, on the Environmental Committee for the Town of Fairview, Texas, and as project manager for large commercial data centers. This is a second career after the US Navy, a computer science degree and 35 years in the computer services industry.

Paul Westbrook *President of RE:source Design in Fairview, TX*
Mr. Westbrook designed his own solar home in north Texas in 1996, which won the Energy Value Housing Award for Innovative Design (<https://enerjazz.com/house>). It still ranks as one of the most efficient homes in Texas. While serving as Sustainable Development Manager at Texas Instruments International Facilities, Mr. Westbrook was the LEED AP for the 1.1 million square foot Texas Instruments factory, which was the first LEED Gold semiconductor factory in the world. He led the effort to improve the energy and water efficiency of TI's 20 million square feet of existing global facilities. They were able to double the company energy and water efficiency in less than 10 years. In 2012, Mr. Westbrook was named a Senior Fellow for the US State Department's Energy and Climate Partnership of the Americas program. He visited Honduras, Bolivia, Columbia, and Peru where he worked with governments, universities, and industry on efficiency and renewable energy. Mr. Westbrook received his B.S. degree in Mechanical Engineering from Louisiana State University, Baton Rouge, LA in 1982.

Seminar Information

The Bob Duncan Center	Registration	Lunch (On your own)
2800 South Center Street	8:00 - 8:30 am	11:45 am - 12:45 pm
Arlington, TX 76014	Morning Session	Afternoon Session
(817) 465-6661	8:30 - 11:45 am	12:45 - 4:30 pm

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

Included with your registration:
Complimentary continental breakfast and printed seminar manual.

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 \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another seminar or the self-study package. You may also send another person to take your place.

Additional Learning

Webinar Series
Low Impact Development (LID)
• **Introduction to Low Impact Development and Bioretention System Design**
Wed., June 5, 2019, 11:00 AM - 1:00 PM CDT
• **LID Residential Development and Case Studies**
Thurs., June 6, 2019, 11:00 AM - 1:00 PM CDT

Fire Protection and Building Codes
• **Introduction to Fire Protection and Life Safety Design**
Thurs., June 6, 2019, 11:00 AM - 12:30 PM CDT
• **Occupancy Classifications**
Thurs., June 6, 2019, 1:00 - 2:30 PM CDT
• **Means of Egress**
Fri., June 7, 2019, 11:00 AM - 1:00 PM CDT
• **Fire Protection Features and Occupancy Exercises**
Fri., June 7, 2019, 1:30 - 3:30 PM CDT

Distributed Battery Webinar
• **The Distributed Battery Webinar, Part I**
Wed., June 12, 2019, 11:00 AM - 2:15 PM CDT
• **The Distributed Battery Webinar, Part II**
Thurs., June 13, 2019, 11:00 AM - 2:15 PM CDT

Water Conservation
• **Evaluating the Owner's Commitment to Water Conservation and Applicable Codes and Standards**
Thurs., June 13, 2019, 11:00 AM - 12:30 PM CDT
• **Assessing the Building Site**
Thurs., June 13, 2019, 1:00 - 2:00 PM CDT
• **Conserving and Reducing Water Use**
Fri., June 14, 2019, 11:00 AM - 1:00 PM CDT
• **Onsite Water Recycling and Minimizing Water Use**
Fri., June 14, 2019, 1:30 - 3:30 PM CDT

For more information
and other online learning opportunities visit:
www.halfmoonseminars.org/webinars/

Continuing Education Credit Information

This seminar is open to the public and offers 6.5 PDHs to professional engineers and 6.5 HSW CEPHs/continuing education hours to architects in all states. In Texas, this includes 1.0 sustainable design hour for architects. Educators and courses are not subject to pre-approval in Texas.

The American Institute of Architects has approved this event for 6.5 HSW Learning Units (Sponsor No. J885). Only full attendance can be reported to the AIA/CES.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700), North Carolina, and North Dakota. HalfMoon Education is deemed an approved continuing education sponsor for New York architects.

This seminar offers a non-credit continuing education opportunity to contractors. It has not been approved by any state contractor licensing entity for continuing education approval.

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*
Arlington, TX - Tuesday, June 25, 2019

How to Register		Registrant Information
Online: www.halfmoonseminars.org		Name: _____ Company/Firm: _____ Address: _____ City: _____ State: _____ Zip: _____ Occupation: _____ Email: _____ Phone: _____
Phone: 715-835-5900	Additional Registrants: Name: _____ Occupation: _____ Email: _____ Phone: _____ Name: _____ Occupation: _____ Email: _____ Phone: _____	
Fax: 715-835-6066	Code:	
Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278		
Complete the entire form. Attach duplicates if necessary.		Email address is required for credit card receipt, program changes, and notification of upcoming seminars and products. Your email will not be sold or transferred.
() I need special accommodations. Please contact me.		

Tuition
() I will be attending the live seminar. Single Registrant - \$289.00 . Three or more registrants from the same company registering at the same time - \$269.00 each.
() I am not attending. Please send me the self-study package: ☐ Downloadable MP3 Audio/PDF Manual for \$269.00 . ☐ CD/Manual Package for \$289.00 . (S&H included. Please allow five weeks from seminar date for delivery)
Checks: Make payable to HalfMoon Education Inc.
Credit Card: <i>Mastercard, Visa, American Express, or Discover</i>
Credit Card Number: _____
Expiration Date: _____ CVV2 Code: _____
Cardholder Name: _____
Billing Address: _____
City: _____ State: _____ Zip: _____
Signature: _____
Email: _____