Agenda

Presented by Jason LaFleur

Net-Zero Energy Home Design Workshop Day One

Monday, December 14, 2020 | 11:00 am - 2:15 pm (including a 15-min. break)

Residential Energy Efficiency Requirements

Reviewing residential provisions of the International Energy Conservation Code (IECC)

To seek (or not to seek) sustainable certifications

Helpful resources

Software for energy modeling and energy-efficient design

Introduction to Project: Net Zero Energy Home

Integrated approaches

Customer considerations

Sizing, orientation and preliminary plans

Energy modeling and HVAC design

Net-Zero Energy Home Design Workshop Day Two

Tuesday, December 15, 2020 | 11:00 am - 2:15 pm (including a 15-min. break)

Workshop: Designing an Energy-Efficient Envelope

R-values and U-factor alternatives

Foundation, roof and exterior walls

Thermal and vapor barriers

Workshop: Choosing Windows and Doors

R-values and U-factor alternatives

Prescriptive fenestration

Envelope testing for net zero success

Net-Zero Energy Home Design Workshop Day Three

Thursday, December 17, 2020 | 11:00 am - 2:15 pm (including a 15-min. break)

Workshop: Designing Heating and Cooling Systems

HVAC systems for zero energy homes

Ductwork and distribution

Service hot water systems

Thermal systems

Mechanical ventilation systems

Self-powered HVAC

Workshop: Electrical Systems and Distributed Energy Resources

Electrical and lighting systems

Electric vehicle infrastructure

Solar photovoltaic energy systems

On-site power generation and energy storage

Project Wrap-Up

2020 Dec. 14, Dec. 15 and Dec. 17, **Design Workshop**

Net-Zero Energy

Home



Learning Objectives

You'll be able to:

Identify residential provisions of the International Energy Conservation Code.

Use home sizing and orientation information to create the preliminary design.

Conduct energy modeling and envelope testing for net-zero success.

Select appropriate heating, cooling and distributed energy systems for net-zero energy.

Design energy efficient electrical and lighting systems.



HalfMoon Education Online Learning

Net-Zero Energy Home Design Workshop

Live. Interactive Webinar Series Monday, December 14, Tuesday, December 15, 2020 and Thursday, December 17, 2020



Design a net-zero energy home in this interactive online workshop

Take a project from preliminary plan to final design

Choose windows, doors and materials that maximize the energy-efficiency of the building envelope

Select heating, cooling and distribution systems to maximize energy efficiency

Learn how to incorporate solar PV systems, onsite energy storage and electric vehicle infrastructure into your design

Continuing Education Credits

Professional Engineers

9.0 PDHs **Architects**

9.0 HSW CE Hours

AIA

9.0 LU|HSW

International Code Council .9 CEUs (Energy)







Faculty

Jason LaFleur Sr. Program Manager, GTI Energy

Mr. LaFleur joined GTI in 2017 as a program manager for the Emerging Technologies team. He manages emerging technology programs, working with clients such as the Department of Energy's Building America program and the Department of Defense to improve energy efficiency and create resilient energy systems and infrastructure. Prior to joining GTI, Mr. LaFleur founded Eco Achievers, a nationally-active zero Energy consulting firm. He has extensive experience working with emerging technologies in the building sector, helping project teams through design, construction and delivery of several zero energy buildings and dozens of high-performance single- and multi-family buildings. He has certified hundreds of homes to LEED, ENERGY STAR, and Passive House standards. Mr. LaFleur is a voting member of ASHRAE 227 Passive Building Standard.

Webinar Information

Day One: Monday, December 14, 2020

Monday, December 14, 2020 | 11:00 am - 2:15 pm (including a 15-min. break)

Day Two: Tuesday, December 15, 2020

Tuesday, December 15, 2020 | 11:00 am - 2:15 pm (including a 15-min. break)

Day Three: Thursday, December 17, 2020

Thursday, December 17, 2020 | 11:00 am - 2:15 pm (including a 15-min. break)

(please log into the webinar 15 - 30 minutes before start time)

Tuition

\$399 for individual registration

\$299 for three or more registrants from the same company at the same time.

Included with your registration: PDF 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

Webinars are presented via GoToWebinar. Instructions and login information will be provided in an email sent close to the date of the webinar. For more information, please visit our FAQ section of our website, or visit www.gotowebinar.com.

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

Additional Learning

Designing for Accessibility under ADA Standards and IBC

- Wed., December 2, 2020 | 8:30 am - 4:30 pm CST

Electrifying the Transportation Sector: Planning and Designing for Electric Vehicle Usage

- Thurs., December 3, 2020 | 11:00 am 2:15 pm CST
- Fri., December 4, 2020 | 11:00 am 2:15 pm CST

2018 International Existing Building Code: Work Area Compliance Method

- Fri., December 4, 2020 | 10:00 am - 2:30 pm CST

Structural Forensic Engineering

- Fri., December 4, 2020 | 7:30 am - 3:30 pm CST

AIA Contract Document Workshop

- Mon., December 7, 2020 | 9:00 am - 5:00 pm CST

IBC International Building Code 2021

- Mon., December 7, 2020 | 8:30 am - 4:20 pm CST

Stormwater Basins and Underground Systems

- Tues., December 8, 2020 | 9:00 am - 4:30 pm CST

Soil Mechanics and Slope Stabilization, Failures and Repairs

- Tues., December 8, 2020 | 10:00 am 1:45 pm CST - Wed., December 9, 2020 | 10:00 am - 2:15 pm CST
- **SketchUp for Building Professionals**
- Tues., December 8, 2020 | 11:00 am 2:45 pm CST
- Wed., December 9, 2020 | 11:00 am 2:45 pm CST

Construction Cost Estimating

- Wed., December 9, 2020 | 8:30 am - 3:50 pm CST

Technical Writing Workshop for Engineers

- Wed., December 9, 2020 | 8:30 am - 5:00 pm CST

Drones in Construction

- Fri., December 11, 2020 | 10:00 am - 4:50 pm CST

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

Continuing Education Credit Information

This webinar offers 9.0 PDHs to professional engineers and 9.0 HSW continuing education hours to architects licensed in all states.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider No. 0004647), Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700), North Carolina (S-0130), and North Dakota. HalfMoon Education is deemed an approved continuing education sponsor for New York engineers and architects via its registration with the American Institute of Architects Continuing Education System (Regulations of the Commissioner §68.14(i)(2) and §69.6(i)(2)). Other states do not preapprove continuing education providers or courses.

The American Institute of Architects Continuing Education System has approved this course for 9.0 LU|HSW (Sponsor No. J885). Only full participation is reportable to the AIA/CES.

The International Code Council has approved this event for .9 CEUs in the specialty area of Energy (Preferred Provider No. 1232).

Completion certificates will be awarded to participants who complete this event, respond to prompts and earn a passing score (80%) on the quiz that follows the presentation (multiple attempts allowed).

Can't Attend? Order the Webinar as a Self-Study Package!

Recordings of this webinar are available for purchase. 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.

Registration

Signature:

Net-Zero Energy Home Design Workshop

| Live, Interactive | : Webinar Series | 6 - Mon., Dec. 14, Tues., Dec. 15 and Thurs. Dec. 17, 2020 |
|------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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| Fax: 715-835-6066 | Code: | Phone: Additional Registrants: Name: |
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