HalfMoon Education Live Continuing Education Webinars

Energy-Efficient Heating and Cooling in Zone 5 and Above

Online - Tuesday, May 2, 2023 | 9:00 am - 4:00 pm CDT

Credits:
Professional Engineers: 6.0 PDHs
Architects: 6.0 HSW CE Hours AIA: 6.0 LU|HSW
International Code Council: .6 CEUs (Building)

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HalfMoon Education Inc.
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ICC PREFERRED EDUCATION PROVIDER

AIA Continuing Education Provider

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Reviewing Heating, Ventilation and Air Conditioning Principles

- Purposes of HVAC systems
- Maintaining thermal comfort in cold climates
- Principles of heat transfer
- Reviewing heat transfer equations for liquids and gases
- Examining sensible and latent heat

Complying with and Exceeding Energy Codes and Standards

- American Society of Heating, Refrigerating and Air Conditioning Engineers standards and guidelines
- Air Conditioning Contractors of America Design Manuals
- International Energy Conservation Code
- Stretch and reach codes

HVAC System Design Considerations

- Building location and construction
- Making HVAC load calculations
- Unconditioned and conditioned spaces
- Single and multiple zone systems
- Sizing systems and using variable capacity systems

Choosing HVAC Systems and Equipment

- Heat pumps: air source and ground source
- Variable refrigerant flow systems
- Forced air systems
- Radiant heat systems
- Constant volume and variable air volume systems
- Distribution systems: piping and ductwork

Equipment and Techniques for High Performance Buildings

- Additional goals of high-performance HVAC: thermal comfort and improved indoor-air quality
- Right-sizing equipment
- Variable load performance
- Shifting and reducing loads
- Heat recovery
- Commissioning
- Operation and maintenance
- Cogeneration

Presented by

Jon Harrod, Ph.D. is a contractor, author, and electrification advocate. In 2006 he founded Snug Planet, an award-winning home performance company based in Ithaca, New York. From its initial focus on energy audits and envelope improvements, Snug Planet has grown to offer whole-home solutions, including moisture management and HVAC upgrades. Snug Planet is an active participant in New York State residential programs serving low-income and market-rate customers. In early 2022, Snug Planet merged with Halco Energy, one of the largest home performance contractors in New York. Jon is certified by the Building Performance Institute as a building analyst, envelope professional, heating professional, and AC/heat pump professional. His articles have appeared in *Home Energy Magazine*, *Journal of Extension*, *Building Performance Journal* and *ASHRAE Journal*. He is a regular contributor to *Green Building Advisor*.

Tuition

$319 for individual registration
$289 for two or more registrants from the same company at the same time.

Included with your registration: *PDF seminar manual.*

Learn More and Register:
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Credits

This webinar is open to the public and is designed to qualify for 6.0 PDHs for professional engineers and 6.0 HSW continuing education hours for licensed architects in all states that allow this learning method. Please refer to specific state rules to determine eligibility.

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) and North Carolina (S-0130). 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 program for 6.0 HSW Learning Units. Only full participation is reportable to the AIA CES.

The International Code Council has approved this event for .6 CEUs in the specialty area of Building (Preferred Provider No. 1232).

Visit this course listing at www.halfmoonseminars.org for updates on pending credits. Completion certificates will be awarded to participants who complete this event and earn a passing score (80%) on the quiz that follows the presentation (multiple attempts allowed).

On-Demand Credits

The preceding credit information only applies to the live presentation. This course in an on-demand format may not be eligible for the same credits as the live presentation; please consult your licensing board(s) to ensure that a structured, asynchronous learning format is appropriate. The following pre-approvals may be available for the on-demand format upon request:
6.0 HSW LUs (AIA)

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