HalfMoon Education Live Continuing Education Webinars

Air-Source Heat Pumps for Residential and Small Commercial Buildings

Online - Wednesday, November 9, 2022 | 9:00 am - 4:50 pm CST

Credits:
Professional Engineers: 7.0 PDHs
Architects: 7.0 HSW CE Hours AIA: 7.0 LU|HSW
International Code Council: .7 CEUs (Energy)

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

NON-PROFIT
U.S. POSTAGE PAID
EAU CLAIRE, WI
PERMIT NO. 2016

HalfMoon Education Inc.
WWW.HALFMOONSEMINARS.ORG

AIA Continuing Education Provider

ICC PREFERRED EDUCATION PROVIDER

Webinar Agenda | Wednesday, November 9, 2022 | 9:00 am - 4:50 pm CST (including a 30-min. break)

Air-Source Heat Pump Science and Technology
Indoor thermal comfort
Principles of heat transfer
The refrigeration cycle
Components and operation of heat pumps: air-source, water-source and ground-source

Air-Source Heat Pump Efficiency, Economics and Operations
Efficiency and energy savings
Cooling, heating, and operation in subfreezing conditions
Treatment under building and mechanical codes
Integrating with other HVAC systems
Hybrid heat pumps

System Sizing and Components
Sizing and locating exterior units
Sizing and locating interior units
Duct systems
Refrigerant and refrigerant lines
Wiring and controls

Mini-Split Systems
Applications for mini-split systems
Sizing and locating exterior and interior units

Commissioning, Maintenance, and Balancing to Maximize Performance
System commissioning
Maintenance requirements
Duct balancing

Heat Pump Case Studies
Air-source heat pumps in cold climates
- Air-source vs. other types of heat pumps in cold climates
- Backup heat source and other cold climate considerations
- Case studies and field performance in cold climates
- Latest research in cold climate heat pumps
- System approach (heat pump + efficient building envelope)

Presented by
Jeffrey Smith *Founder and owner of J.A. Smith Heating & Air Conditioning, Inc. of Warminster, Pennsylvania*

Tom Marsik *Associate Professor of Sustainable Energy at the University of Alaska Fairbanks Bristol Bay Campus and Alaska Center for Energy and Power*

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.*

Can't Attend? Order the Webinar as an On-Demand Package!
Recordings of this webinar are available for purchase. See details online 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.

Learn More and Register:
www.halfmoonseminars.org
Customer Service (715) 835-5900 Ext. 1

or scan here

Credit Information

This webinar is open to the public and is designed to qualify for 7.0 PDHs for professional engineers and 7.0 HSW continuing education hours for licensed architects 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) 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 course for 7.0 LU|HSW (Sponsor No. J885). Only full participation is reportable to the AIA/CES.

The International Code Council has approved this event for .7 CEUs in the specialty area of Energy (Preferred Provider No. 1232).

Attendance will be monitored, and attendance certificates will be available after the webinar for those who attend the entire course and score a minimum 80% on the quiz that follows the course (multiple attempts allowed).