Credit Information

National Electrical Code 2017 of Ohio

This webinar is open to the public and offers 7.0 PDHs to professional engineers and 7.0 HSW continuing education hours to architects in Ohio. Educators and courses are not subject to preapproval in Ohio.

Engineers and architects seeking continuing education credit in other states will be able to claim the hours earned at this webinar, in most cases. Refer to specific state rules to determine eligibility.

The American Institute of Architects Continuing Education System has approved this course for 7.0 LU | HSW (Sponsor No. 1885). Only full attendance is reportable to the

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

The Ohio Construction Industry Licensing Board has approved this course for 7.0 Code hours for electrical contractors. Licensees must present their Ohio licenses and photo identification at the webinar in order to obtain a certificate of completion and have their hours reported by HalfMoon Education (Agency No. 741).+

The Ohio Board of Building Standards has approved this course for the following continuing education hours: BI(7.0), BO(7.0), BPE(7.0), EPE(7.0), ESI(7.0), FPI(7.0), FPPE(7.0), MPE(7.0), MI(7.0), Mech PE(7.0), RBI(7.0), RBO(7.0), RMI(7.0), RPE(7.0).

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).

+ Credit approved for live event only

Complying with the Ohio Residential Energy Code

This webinar is open to the public and offers 7.0 PDHs to professional engineers and 7.0 HSW continuing education hours to architects in Ohio. Educators and courses are not subject to preapproval in Ohio.

Engineers and architects seeking continuing education credit in other states will be able to claim the hours earned at this webinar, in most cases. Refer to specific state rules to determine eligibility.

The American Institute of Architects Continuing Education System has approved this course for 7.0 LU | HSW (Sponsor No. | 885). 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).

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 each webinar are available for purchase. See course listing 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.

National Electrical Code 2017 of Ohio Complying with the Ohio Residential Energy Webinars Interactive

Live,

Code

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



Live, Interactive Webinars

National Electrical Code 2017 of Ohio

- Thursday, April 28, 2022 | 8:00 am - 4:30 pm EDT

Complying with the **Ohio Residential Energy Code**

- Tuesday, May 3, 2022 | 8:30 am - 4:20 pm EDT

To register, view detailed presenter biographies, and see other learning opportunities, please visit:

www.halfmoonseminars.org

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HalfMoon Education Live Webinars



National Electrical Code 2017 of Ohio

Thursday, April 28, 2022 | 8:00 am - 4:30 pm EDT

Architects: 7.0 HSW CE Hours Credits: Professional Engineers: 7.0 PDHs AIA: 7.0 LU|HSW International Code Council: .7 CEUs (Electrical) Ohio Electrical Contractors: 7.0 Code Hours Ohio Electrical Safety Inspectors: 7.0 CEUs



Complying with the **Ohio Residential Energy Code**

Tuesday, May 3, 2022 | 8:30 am - 4:20 pm EDT

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

To register, visit us online at

www.halfmoonseminars.org

or call our Customer Service Department at (715) 835-5900







National Electrical Code 2017 of Ohio

Thursday, April 28, 2022 | 8:00 am - 4:30 pm EDT (incl. a 60-min break)

Tuition: \$319 per registrant, \$289 per registrant for two or more

Agenda

Overview of Major Changes in the 2017 Code and Preview of Expected Changes in Future Codes

Article 425: Fixed Industrial Process Heating

Article 691: Large-Scale PV Electric Power Production

Article 706: Energy Storage Systems Article 710: Stand-Alone Systems

Article 712: Direct-Current Microgrids Ohio amendments

Chapter 1: National Electrical Code

Requirements for electrical installations, including

Clearances and free space requirements about equipment

New reconditioned equipment, identification and traceability;

New limited access working space requirement

New short-circuit current documentation

Chapter 2: Wiring and Protection

Grounded conductors Voltage drop calculations

Branch circuit, feeder and services calculations

GFCI receptacle outlet requirements Service requirements

Transformer protection **New** GFCI protection for non-dwelling units

Grounding and Bonding

Grounding of service entrances Grounding of separately-derived systems

Grounding electrodes

Sizing of grounding electrode and grounding conductor

Bonding of services

Chapter 3: Wiring Methods and Materials

Wiring methods - underground installation requirements

Conductors for general wiring

Conductor ampacity correction and adjustments

Number of conductors in a raceway Pull and junction box fill calculation

New single-phase dwelling services and feeders

Chapter 4: Equipment for General Use

Flexible cords and cables Receptacle requirements Switchboards and panel boards Short circuit ratings

Luminaires, appliances, transformers, and motors

Chapter 5: Special Occupancies

Hazardous locations Commercial garages Recreational vehicle parks Health care facility requirements

Chapter 6: Special Equipment

Signs, outline lighting, elevators Hybrid vehicle's plug in requirements

Data center requirements Pools and spas

Solar photovoltaic systems Small wind turbine systems

Chapter 7: Special Conditions

Emergency systems Class 1, 2, and 3 power-limited circuits

Fire alarm circuits

Chapter 8: Communications Circuits

Premises-powered broadband communication systems Network-powered broadband communication systems

Chapter 9: Tables

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

> Ohio Electrical Contractors: 7.0 Code Hours Ohio Electrical Safety Inspectors: 7.0 CEUs

Presented by ID White Consultant at Freelance Electrical System Design and Drafting Mr. White's past ten years with Columbus State Community College in Columbus, Ohio, as its Skilled Trades Program coordinator, have provided him with insights beyond teaching, including migration to semesters, and providing oversight of 144 apprenticeship courses and 28 open enrollment courses covering construction, carpentry, electrical, plumbing, and welding. Mr. White helped craft 15 plans for study for various certificates, AAS majors, and ATS majors. He has been an active part of articulation agreements, with various vocational career programs and apprenticeship programs. He started a new open enrollment program in June of 2007, which had over 200 active students, and filled 28 course sections per term, prior to him handing it over to a new faculty member. Mr. White is presently working with 10 apprenticeship partnerships with annual enrollment of 1,500 students. He has oversight of five labs, equipment, materials, and lab personnel.

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Added Value:

Enhance your learning - a recording of this webinar will be available for attendees to stream online for two weeks after the program date. (live webinar attendance required to receive credit)

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

Recordings of these webinars are available for purchase. Visit these course listings on our website 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.

Additional Learning

Adopting and Complying with the Zero Code 2.0

- Tues, April 5, 2022 | 9:30 am - 5:30 pm EDT

Ohio Deep Foundations and Excavations

- Thurs, April 7, 2022 | 8:00 am - 5:00 pm EDT

International Building Code 2021

- Tues, April 12, 2022 | 9:00 am - 5:00 pm EDT Shoreline Protection - Lakes, Ponds

IBC Building Classification, **Occupancy and Mixed Occupancies** - Wed, April 13, 2022 | 10:00 am - 5:30 pm EDT Reading, Interpreting and

Designing for Fire Protection - Tues, April 19, 2022 | 10:00 am - 5:00 pm EDT

Structural Forensic Engineering

Managing Construction with AIA Document A201: General Conditions

- Thurs, April 21, 2022 | 10:00 am - 5:30 pm EDT

Designing and Constructing a Net-Zero Energy Home

- Tues, April 26, 2022 | 9:30 am - 2:00 pm EDT

- Wed, April 27, 2022 | 9:30 am - 2:30 pm EDT

and Other Inland Waters

- Tues, April 26, 2022 | 9:30 am - 5:30 pm EDT

Writing Land Descriptions Workshop - Fri, April 29, 2022 | 10:00 am - 5:00 pm EDT

For more information and other online learning opportunities visit: - Tues, April 19, 2022 | 10:00 am - 4:50 pm EDT www.halfmoonseminars.org

Complying with the **Ohio Residential Energy Code**

Tuesday, May 3, 2022 | 8:30 am - 4:20 pm EDT (incl. a 30-min break)

Tuition: \$319 per registrant, \$289 per registrant for two or more

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

Agenda

General Administration of the Code

Code history and development

Development of the International Energy Efficiency Code 2018 Adoption in Ohio Scope and general requirements

Amendments Inspections

Referenced standards

IECC Residential Chapters 2-3

Definitions Climate zones

Materials, systems and equipment

Code Compliance Alternatives

ResCheck Performance-based compliance

Energy rating index compliance alternative

Chapter 4: Residential Energy Efficiency

Building thermal envelope Insulation requirements

Fenestration requirements R-values and U-factor alternatives

Prescriptive insulation:

 Ceilings, access doors • Mass walls, basement walls, sunrooms

 Slab-on-grade floors Prescriptive fenestration:

Air leakage and testing

Fireplaces and fuel-burning appliances

Energy modeling

Chapter 4: Heating and Cooling Systems

Control systems Ductwork insulation and sealing Service hot water systems Mechanical ventilation systems

Pools and spas

Chapter 4: Electrical Power and Lighting Systems Lighting systems Power systems

Chapter 5: Existing Buildings

Building additions Making building alterations Building repairs and maintenance Change of occupancy

Presented by Robert J. Schutz PE PS CBO Consulting Engineer & Code Instructor Robert J. Schutz is a recently retired building official with the City of Columbus, Ohio. He was previously a senior staff engineer with the International Code Council in product development after several years as their manager of instructors in the ICC Training & Education Department. He has also served as an assistant architect administrator at the Ohio Board of Building Standards. While with the State of Ohio, he oversaw the new Residential Code of Ohio program, including certification of local residential code departments and personnel. His varied previous experiences include active military service during the 1980s as an Army Corps of Engineers (ACE) officer; building code enforcement for several central Ohio jurisdictions, including ten years as chief building official (CBO) for the City of Powell where he also served as city engineer and director of public services; and chief engineer for the Ohio Department of Health, where he chaired the state's plumbing advisory board, was chief of plumbing and was a voting member on the Ohio Board of Building Standards.

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