

Agenda

Presented by Edward Fronapfel

Development and Enforcement of International Residential Code

- History of the International Residential Code (IRC)
- Adoption and enforcement of International Residential Code
- Recent and anticipated Code amendments
- Future of the Code

Building Planning and Shell Construction (Chapters 2-10)

- Definitions
- Alternative provisions and design criteria
- Wind effects and protection of openings
- Seismic provisions
- Story height and live loads Snow loads
- Fire-resistant construction and exterior walls
- Dwelling unit separations and garage separation
- Ceiling heights Glazing
- Garages and carports
- Ingress, egress and stairways
- Fire and carbon monoxide safety and detection
- Foam plastic
- Wood and wood-based products Accessibility
- Floods, storms and drainage
- Soils and foundations Framing and fastening
- Walls and wall covering Roof/ceiling construction
- Roof assemblies Fireplaces and chimneys

Energy Efficiency (Chapter 11)

- Compliance Building thermal envelope
- Climate classifications
- Permanent energy certificate
- Insulation and fenestration
- Building systems Lighting

Mechanical, Fuel, Plumbing and Electrical Systems

- Appliance installation and exhaust systems
- Ventilation Hydronic systems
- Fuel gas systems and appliances
- Plumbing fixtures Drains
- Backflow preventers, venting, sumps and ejectors
- Fire sprinkler systems
- Electrical system grounding
- Intersystem bonding termination
- Overcurrent devices Electrical outlets
- Luminaires Pools, spas and hot tubs

International Residential Code 2018
Denver, CO - Thursday, June 21, 2018



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Learning Objectives

You'll be able to:

- Discuss** the International Residential Code's adoption and enforcement in the state of Colorado.
- Identify** code requirements for the building shell, including foundations, floors, walls, ceilings and roofs.
- Define** energy efficiency requirements and evaluate various compliance methods.
- Enhance** your understanding of requirements for fire safety and detection systems.
- Understand** requirements for mechanical, fuel, plumbing and electrical systems.



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- Review** the adoption and enforcement of the International Residential Code (IRC)
- Examine** code requirements for building planning and shell construction
- Learn** about requirements for mechanical fuel, plumbing and electrical systems
- Discuss** energy efficiency requirements and compliance methods
- Explore** wind, flood and seismic provisions

Continuing Education Credits

- Architects**
6.5 HSW CEHs
6.5 AIA HSW Learning Units
- Professional Engineers**
6.5 PDHs
- International Code Council**
.65 CEUs (Building)

- Contractors**
Non-Credit Continuing Ed



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Faculty

Edward Fronapfel MSCE, PE, CBIE, CFCC, EDI, CBCP Schutz *Fellow Member of NAFE, Owner, SBSA, Inc., Golden, CO*

Mr. Fronapfel holds a bachelor of science degree in Civil Engineering and a master of science degree in Civil Engineering with an emphasis in forensic and structural engineering. He is a board certified building inspection engineer through the National Academy of Building Inspection Engineers and a fellow member of the National Academy of Forensic Engineers. In addition, Mr. Fronapfel is a level 2 thermographer and a level 2 post tension examiner. He is certified by the National Association of Certified Home Inspectors and is a third party Exterior Design Institute inspector. He teaches as an adjunct professor at the University of Denver in the Burn’s School of Real Estate and Construction Management. Courses include Estimating, Project Management and Control, Sustainability in Construction, Residential Construction Systems and Environmental Systems and MEP. His work experience encompasses geohydraulic engineering, hydraulics, hydrology, civil and structural engineering for new development, warranty work, property claim support, repair and rehabilitation design. Mr. Fronapfel’s building science work includes interior ventilation control; HVAC sizing verifications, and analysis; and moisture management systems for attics, crawlspaces and basements for residential and commercial structures. He has additional background in masonry, stucco, EIFS, and many components used for cladding buildings from foundation systems to roofing systems. Mr. Fronapfel’s experience includes over 450 deposition testimonies and over 55 trial testimonies, as well as hundreds of mediations, and arbitrations. He is a registered engineer in Alabama, Arizona, Colorado, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Montana, Missouri, Nebraska, New Jersey, Nevada, New Mexico, North Carolina, North Dakota, Oklahoma, Oregon, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, and Wyoming. Mr. Fronapfel holds active memberships in many professional organizations including RCI, AIA, NSPE, CABO, RESNET and others. He is a published writer in *The Journal of RCI*, *The Forensic Engineering Task Force*, *The Investigative Engineer*, *The I-ENG-A Report*, *Colorado Claims Guide*, *Building Integration Solutions*, *Construction Accounting and Taxation*, and *The Journal of Forensic Engineering*.

Seminar Information

Doubletree Hotel Denver - Stapleton North
4040 Quebec Street
Denver, CO 80216
(303) 321-6666

Tuition
\$279 for individual registration
\$259 for three or more registrations.
Registration does not include a copy of the Code itself.
Each registration includes a 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 CD/manual package. You may also send another person to take your place.

Registration
8:00 - 8:30 am
Morning Session
8:30 - 11:45 am
Lunch (on your own)
11:45 am - 12:45 pm
Afternoon Session
12:45 - 4:30 pm

Continuing Education Credit Information

This seminar is open to the public and offers 6.5 HSW continuing education hours to architects in all states, except Florida architects. Educators and courses are not subject to preapproval in Colorado. This course also offers 6.5 PDHs to professional engineers in all states (non-mandatory in Colorado).

This seminar is approved by the American Institute of Architects for 6.5 HSW Learning Units (Sponsor No. J885). Only full attendance can be reported to the AIA/CES.

HalfMoon Education is deemed an architect continuing education sponsor in New York. HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana, Maryland, New Jersey (Approval No. 24GP00000700), New York (NYSED Sponsor No. 35), North Carolina, and North Dakota.

This seminar is approved by the International Code Council for .65 CEUs in the specialty area of Building.

This event also offers a continuing education opportunity to construction contractors. It has not been submitted to 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.

Additional Learning

Webinar Series
Community Solar and Rooftop Solar

- **Community Solar**
Wed., May 2, 2018, 11:00 AM - 2:15 PM CDT
- **Design Your Solar Roof**
Thurs., May 3, 2018, 11:00 AM - 2:15 PM CDT

Complying with Fire and Building Codes

- **Introduction to Fire Protection and Life Safety Design**
Thurs., May 3, 2018, 11:00 AM - 12:30 PM CDT
- **Occupancy Classifications**
Thurs., May 3, 2018, 1:00 - 2:30 PM CDT
- **Means of Egress**
Fri., May 4,, 2018, 11:00 AM - 1:00 PM CDT
- **Fire Protection Features and Occupancy Exercises**
Fri., May 4, 2018, 1:30 PM - 3:30 PM CDT

Pavement Design

- **Principles of Pavement Design**
Thurs., May 10, 2018, 11:00 AM - 12:30 PM CDT
- **Flexible Pavement Design**
Thurs., May 10, 2018, 1:00 - 2:30 PM CDT
- **Rigid Pavement Design**
Fri., May 11, 2018, 11:00 AM - 12:30 PM CDT
- **Pavement Drainage and Maintenance**
Fri., May 11, 2018, 1:00 PM - 2:30 PM CDT

Foundations in Cold Regions

- **Introduction to Cold Regions Foundations**
Thurs., May 17, 2018, 11:00 AM - 12:30 PM CDT
- **Shallow Foundation Design in Cold Regions**
Thurs., May 17, 2018, 1:00 - 2:30 PM CDT
- **Deep Foundation Design in Cold Regions**
Fri., May 18, 2018, 11:00 AM - 12:30 PM CDT
- **Foundation Construction in Cold Regions**
Friday, May 18, 2018, 1:00 - 2:00 PM CDT

Proposal Writing

- Tues., May 22, 2018, 11:00 AM - 3:30 PM CDT

Soil Engineering

- **Introduction to Soil Engineering**
Wed., May 30, 2018, 11:00 AM - 12:30 PM CDT
- **Design of Excavation Support Systems**
Wed., May 30, 2018, 1:00 - 2:30 PM CDT
- **Slope Repair Techniques**
Thurs., May 31, 2018, 11:00 AM - 12:30 PM CDT
- **Practical Approaches to Foundations and Retaining Structures**
Thurs., May 31, 2018, 1:00 - 2:30 PM CDT

Can’t Attend? Order the CD/Manual Package:
An audio recording of this seminar is available for \$289 (including shipping). Allow five weeks from the seminar date for delivery. Please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

Registration

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How to Register	Registrant Information Name: _____ Company/Firm: _____ Address: _____ City: _____ State: _____ Zip: _____ Occupation: _____ Email: _____ Phone: _____ Additional Registrants: Name: _____ Occupation: _____ Email: _____ Phone: _____ Name: _____ Occupation: _____ Email: _____ Phone: _____ 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.
Online: www.halfmoonseminars.org	
Phone: 715-835-5900	
Fax: 715-835-6066	
Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278	
Complete the entire form. Attach duplicates if necessary.	

Tuition () I will be attending the live seminar. Single Registrant - \$279.00 . Three or more registrants from the same company registering at the same time - \$259.00 each. () I am not attending. Please send me the 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: _____