Agenda

Presented by Nathan Walsman

Parking Geometrics and Layout
- Typical parking layout
- Parking ramp requirements
- Parking structure design
- Egress requirements
- ADA requirements
- Vertical circulation
- ADA standards
- Parking structure design
- Egress requirements

Structural Systems for Parking Structures
- Typical construction types
- Cast-in-place, post-tensioned concrete
- Steel construction
- Prestressed, precast concrete
- Ceiling and floor systems
- Concrete strength and design

Parking Structure Design
- Loading requirements
- Live load
- Snow load
- Wind load
- Thermal, creep, shrinkage, shortening
- Tensile stresses and classification
- Minimum P/A stress
- Minimum bonded reinforcement
- Balanced dead load
- Loss of tendons during construction

Lateral Force Resisting Systems
- Types of lateral force resisting systems
- Moment frames
- Cantilevered columns
- Shear walls
- Shear walls and lightwalls
- Visibility and safety

Durability and Maintenance
- Mix design and classification
- Admixture options
- Life cycle cost analysis
- Finishing and curing
- Routine maintenance guidelines

Construction Issues
- Sleeves and conduits
- Tendon profile issues
- Post installed anchors

Learning Objectives

You’ll be able to:

Identify and describe requirements for parking layout, including one-way vs. two-way traffic, turning bay requirements and square footage per space.

Consider requirements for vertical circulation in parking structures, and meet standards for accessible parking spaces required under the Americans with Disabilities Act.

Compare typical construction types for parking structures, including cast-in-place, prestressed precast concrete, and steel construction.

Comply with loading requirements for parking structures, including live loads, snow loads, wind loads and seismic loads, and utilize lateral force resisting systems in parking structures.

Parking Structure Design, Construction and Maintenance

Cincinnati, OH - Friday, February 28, 2020

Discuss parking lot layout and vertical circulation requirements

Review ADA accessibility standards and egress requirements

Examine cast-in-place, post-tensioned concrete structures and precast, prestressed structures

Explore loading requirements for live loads, and for snow, wind and seismic loads

Learn techniques for improving durability

Continuing Education Credits

Professional Engineers
6.5 PDHs

Architects
6.5 HSW Continuing Ed. Hours
6.5 AIA LU|HSW

Contractors
Non-Credit Continuing Ed.
Nathan Walsman, P.E., Principal at Schaefer in Cincinnati, OH

Mr. Walsman graduated from Purdue University with BS and MS degrees. He has been a principal engineer at Schaefer in Cincinnati since 2005. Mr. Walsman has a proven resume of work experience in the area of structural engineering and in parking structures in particular. He has been working in structural engineering since 1999, and he has since designed over 40 parking structures.

Here’s what attendees had to say about the program and presenter Nathan Walsman:

"Great presenter, very knowledgeable on topics." — Structural Engineer

Mr. Walsman has since designed over 40 parking structures.

A proven resume of work experience in the area of structural engineering and in parking structures. He has been working in structural engineering since 1999, and he has since designed over 40 parking structures.

Mr. Walsman graduated from Purdue University with BS and MS degrees. He has been a principal engineer at Schaefer in Cincinnati since 2005. Mr. Walsman has a proven resume of work experience in the area of structural engineering and in parking structures in particular. He has been working in structural engineering since 1999, and he has since designed over 40 parking structures.

Additional Learning

Webinar Series
Ethical Issues for Engineers
• Handling Ethical Issues in Professional Engineering Practice
  Fri., Jan. 17, 2020, 12:00 - 2:08 PM CST
• Resolving Disputes and Handling Ethical Issues in Government Projects
  Fri., Jan. 31, 2020, 12:00 - 1:00 PM CST
• Compliance with Rules of Professional Conduct
  Fri., Feb. 14, 2020, 12:00 - 1:00 PM CST

Off-Grid Master Class
Part I
Wed., Jan. 22, 2020, 11:00 AM - 2:15 PM CST
Part II
Thurs., Jan. 23, 2020, 11:00 AM - 2:15 PM CST

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

Continuing Education Credit Information

This seminar is open to the public and offers 6.5 PDHs to professional engineers and 6.5 HSWS continuing education hours to architects in all states. Engineers and architects are not subject to preapproval in Ohio.

This American Institute of Architects Continuing Education System has approved this course for 6.5 LU/HSW (Sponsor No. J885). Only full attendance is reportable to the AIA/CES. Visit www.halfmoonseminars.org for complete AIA/CES information under this course listing.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana (License No. CE2710059), Maryland, New Jersey (Approval No. 24GP00010700), North Carolina, and North Dakota. HalfMoon Education is deemed an approved continuing education sponsor for New York engineers and architects.

This course offers a non-credit continuing education opportunity to contractors. It has not been approved by any state contractor licensing entity for licensing maintenance.

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.

Can't Attend? Order the Manual and Audio from the Live Seminar as a Self-Study Package!
Audio recordings of this seminar are available for purchase starting at $269. This learning method does not qualify for the continuing education requirements of Ohio engineers, architects, and AIA members. No contractor credit available. Please allow five weeks from the seminar date for delivery.

Tuition

I will be attending the live seminar. Single Registrant - $289.00. Three or more registrants from the same company registering at the same time - $269.00 each.

I am not attending. Please send me the self-study package.

Downloadable MP3 Audio/PDF Manual for $269.00.
CD/Manual Package for $289.00. USB/Manual Package $289.00. (SAH included. Please allow five weeks from seminar date for delivery)

Checks: Make payable to HalfMoon Education Inc.
Credit Card: Mastercard, Visa, American Express, or Discover
Credit Card Number: ____________________________
Expiration Date: ____________________________ CVV2 Code: ____________________________
Cardholder Name: ____________________________
Billing Address: ____________________________
City: ____________________________ State: ____________________________ Zip: ____________________________
Signature: ____________________________
Email: ____________________________

© 2019 HEI #20 OHPKSDCM 2 28 CINC CP

How to Register

Online: www.halfmoonseminars.org
Phone: 715-835-5900
Fax: 715-835-6066
Code: ____________________________
Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278

Complete the entire form. Attach duplicates if necessary.

Registrant Information

Name: ____________________________
Company/Firm: ____________________________
Address: ____________________________
City: ____________________________ State: ____________________________ Zip: ____________________________
Phone: ____________________________
Email: ____________________________

© 2019 HEI #20 OHPKSDCM 2 28 CINC CP

How to Register

Online: www.halfmoonseminars.org
Phone: 715-835-5900
Fax: 715-835-6066
Code: ____________________________
Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278

Complete the entire form. Attach duplicates if necessary.

Registrant Information

Name: ____________________________
Company/Firm: ____________________________
Address: ____________________________
City: ____________________________ State: ____________________________ Zip: ____________________________
Phone: ____________________________
Email: ____________________________

© 2019 HEI #20 OHPKSDCM 2 28 CINC CP

How to Register

Online: www.halfmoonseminars.org
Phone: 715-835-5900
Fax: 715-835-6066
Code: ____________________________
Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278

Complete the entire form. Attach duplicates if necessary.

Registrant Information

Name: ____________________________
Company/Firm: ____________________________
Address: ____________________________
City: ____________________________ State: ____________________________ Zip: ____________________________
Phone: ____________________________
Email: ____________________________

© 2019 HEI #20 OHPKSDCM 2 28 CINC CP