

Agenda

Presented by

James W. Pudleiner, PE; Gregory J. Neiderer, PE;
Joseph Wilcher, III, PE; William C. Reiter, PE

Planning for Structured Parking

How many spaces are needed
Shared parking concepts Site selection

Functional Design

Introduction Types of parking structures
The level of service approach
Parking geometrics Circulation systems

Building Codes

Life safety issues Means of egress
Guards and vehicle barriers

Accessible Parking Design

Introduction to ADA Parking design under ADA
Other considerations

Passive Security, Lighting and Other Design Elements

Open Q & A and Case Studies/Examples

Structural Systems

Cast-in-place, post-tensioned
Precast, prestressed Structural design overview

Designing for Durability

Concrete admixtures Expansion joint systems
Joint sealants Traffic coatings
Life cycle cost

Maintenance, Restoration, and Repair

The deterioration curve
Benefits and challenges for various types of parking structures
Condition assessments
Establishing a restoration program
Repair documents
Routine repair and maintenance
Proactive repair and maintenance
Structural repairs

Design for Adaptive Use

What is adaptive use Adaptive reuse concepts and basic costs

Open Q & A and Case Studies/Examples

Parking Structure Design, Construction and Maintenance

Fairfax, VA - Tuesday, January 14, 2020



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

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

Learning Objectives

You'll be able to:

Calculate how many parking spaces are required for different facility needs.

Assess the suitability of proposed sites for parking structures.

Explore parking geometrics and circulation systems.

Comply with life safety codes and requirements for means of egress, accessibility, guards and vehicle barriers.

Assist in developing plans for parking structure maintenance, restoration and repair to ensure maximum safety and longevity.



Parking Structure Design, Construction and Maintenance

Fairfax, VA - Tuesday, January 14, 2020



Calculate numbers of parking spaces needed

Explore parking geometrics and circulation systems

Examine passive security and lighting

Learn about accessible parking design

Explore structural systems, including cost-in-place, post tensioned, precast and prestressed

Discuss maintenance, restoration and repair

Design for durability with admixtures and joint sealants

Continuing Education Credits

Professional Engineers

6.5 Continuing Ed. Hours

Contractors

Non-Credit Continuing Ed.

Architects

6.5 Continuing Ed. Hours (HSW)

6.5 AIA LU|HSW



HalfMoon Education Inc.
WWW.HALFMOONSEMINARS.ORG

AIA
Continuing
Education
Provider

Faculty

James W. Pudleiner, PE *Vice President of Walker Consultants Philadelphia Office*

Mr. Pudleiner started with Walker’s Philadelphia office in 2002 as a design engineer and was promoted to vice president in 2016. His structural background includes experience in structural steel, pre-stressed precast concrete, cast-in-place post-tension concrete and shallow and deep foundation design. In addition to the structural expertise gained over 17 years and more than 50 successful structures, Mr. Pudleiner was also the project manager on one of the first garages to be awarded the Parksmart Certification – The Universities at Shady Grove parking structure. In addition to the Shady Grove project, his green garage experience includes parking structures for Canton Crossing, North Bethesda Conference Center, Suburban Hospital, and Park Center. As managing principal of the Philadelphia office, he oversees the production of all projects including new design, restoration, and study services. Mr. Pudleiner plays an integral part in providing project planning, scheduling, and quality assurance to Walker’s clients through his thorough understanding of all aspects related to the design and restoration of multi-level parking facilities. Mr. Pudleiner received a B.S. degree in Civil Engineering from The Pennsylvania State University. He is licensed as a professional engineer in the states of Pennsylvania, Delaware, Maryland, Michigan, New Jersey, and West Virginia.

Gregory J. Neiderer, PE *Director of Restoration at Walker Consultants Philadelphia Office*

Mr. Neiderer was with Walker between 1984 and 1988 and since 1996; he has experience in the new design and restoration of parking structures, buildings and industrial facilities. In his more than 37 years in engineering, including 22 years in restoration services, Mr. Neiderer has amassed a resume that includes extensive experience with due diligence, condition appraisal, design, nondestructive testing, quality control, project management, training and business development. His focus of experience includes post-tensioned and mild reinforced concrete systems, concrete and masonry durability, exposed and protected membrane systems, balconies, plazas facades and roofs. Mr. Neiderer is an active member of the International Concrete

Repair Institute; the Sealant, Waterproofing & Restoration Institute; the International Institute of Building Envelope Consultants and the American Institute of Steel Construction. He has published numerous articles on providing restoration services.

Joseph Wilcher, III, PE *Restoration Consultant at Walker Consultants Washington, DC Office*

Mr. Wilcher is a restoration consultant in the Washington, DC, office with over 10 years of experience in the evaluation and forensic restoration of defects, deficiencies and failures of building envelope and structural systems. His experience is in the assessment, investigation, and repair/rehabilitation of building structures and site features; strengthening, modifications, and design of existing and new structures; preparation of shoring designs for emergency structural issues and repair and replacement projects; evaluation and design for remediation of building moisture infiltration conditions; and construction observation as well as contract administration services for projects. Mr. Wilcher is an active member of the American Concrete Institute (ACI) and the International Concrete Repair Institute (ICRI) as well as other professional organizations. He is a licensed professional engineer in the Commonwealth of Virginia, the District of Columbia, and the States of Delaware and Maryland.

William C. Reiter, PE *Executive Vice President at Walker Consultants Philadelphia Office*

Located in Walker’s Philadelphia office, Mr. Reiter is an executive vice president, overseeing risk management and quality for Walker Consultants. Over his 32-year career, Mr. Reiter has participated in over 300 parking structure projects, and has amassed extensive experience in functional design, structural engineering, and restoration of parking facilities. He is a graduate of Villanova University with a bachelor of science degree in Civil Engineering and a master of science degree in Structural Engineering. Mr. Reiter is a licensed professional engineer in the District of Columbia, Massachusetts, Pennsylvania, Virginia, Maryland, Michigan, and New York.

Seminar Information

Hilton Garden Inn Fairfax

3950 Fair Ridge Drive
Fairfax, VA 22033
(703) 385-7774

Registration
8:00 - 8:30 am
Morning Session
8:30 am - 12:00 pm
Lunch (On your own)
12:00 - 1:00 pm
Afternoon Session
1:00 - 4:30 pm

Tuition

\$289 for individual registration
\$269 for three or more registrants from the same company at the same time.

Included with your registration: Complimentary continental breakfast and printed seminar manual.

Receive a reduced tuition rate of \$101 by registering to be our on-site coordinator for the day. For availability and job description, please visit www.halfmoonseminars.org.

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 self-study package. You may also send another person to take your place.

Continuing Education Credit Information

This seminar is open to the public and offers 6.5 continuing education hours to professional engineers and architects (HSW) in all states. Educators and courses are not subject to preapproval in Virginia.

This event has been approved by the American Institute of Architects Continuing Education System 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. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700), North Carolina, and North Dakota. HalfMoon Education is deemed an approved continuing education sponsor for New York engineers and architects.

This seminar offers a non-credit continuing education opportunity to construction contractors; it has not been approved by any state contractor licensing entity for continuing education purposes.

Attendance will be monitored, and attendance certificates will be available after the seminar for most individuals who complete the entire program. Attendance certificates not available at the seminar will be mailed to participants within fifteen business days.

Additional Learning

Webinar Series

International Green Construction Code

- **Introduction to the International Green Construction Code (IgCC)**
Wed., Dec. 11, 2019, 11:00 AM - 12:30 PM CST
- **IgCC Chapters 4-5: Site Development and Material Use**
Wed., Dec. 11, 2019, 1:00 - 2:30 PM CST
- **IgCC Chapters 6-9: Energy, Water, Environmental Quality and Building Commissioning**
Thurs., Dec. 12, 2019, 11:00 AM - 12:30 PM CST
- **IgCC Chapters 10-11: Existing Buildings**
Thurs., Dec. 12, 2019, 1:00 - 2:30 PM CST

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

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. See registration panel 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.

Registration

Parking Structure Design, Construction and Maintenance

Fairfax, VA - Tuesday, January 14, 2020

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

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: <input type="checkbox"/> Downloadable MP3 Audio/PDF Manual for \$269.00 . <input type="checkbox"/> CD/Manual Package for \$289.00 . <input type="checkbox"/> USB/Manual Package \$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: _____