

Agenda

Presented by K. Anthony Hoover, FASA, INCE Bd. Cert

Fundamentals and Sound Outdoors

Fundamentals

- Level in decibels, dB
- Frequency in Hertz, wavelength in feet
- Common descriptors – dBA, NC
- Response to sound – sound vs noise, speech, tones

Sound outdoors

- How sound propagates
- Barriers

Sound Indoors

Reflection and absorption

- Sound absorption and noise reduction coefficients (NRC)
- Reverberation

Speech intelligibility and sound quality

HVAC systems and background noise

Design and materials for sound control

Sound Transmission and Isolation

Practical techniques for controlling sound transfer

- Interior walls - sound transmission class (STC)
- Exterior walls - outdoor/indoor transmission class (OITC)
- Floors - impact insulation class (IIC)
- Ceilings for partial height walls - ceiling attenuation class (CAC)

Mechanical systems noise control

Design and materials for sound control

Providing Acoustical Comfort

Audibility, intelligibility, and privacy

Electronic sound systems

Several building types, and examples

Residential, schools, healthcare, public gathering, etc.

Codes and criteria overview

- LEED
- ANSI S12.60 for schools
- CHPS

Architectural Acoustics – Design and Construction

Live, Interactive Webinar - Thursday, March 11, 2021



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

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Learning Objectives

You'll be able to:

Discuss the science of sound, including level, frequency and wavelength.

Explore response to sound, and distinguish sound from noise.

Examine the behavior of sound indoors, focusing on sound absorption and reverberation.

Review factors which impact sound transmission and isolation in buildings, including walls, floors, ceilings and finishes.

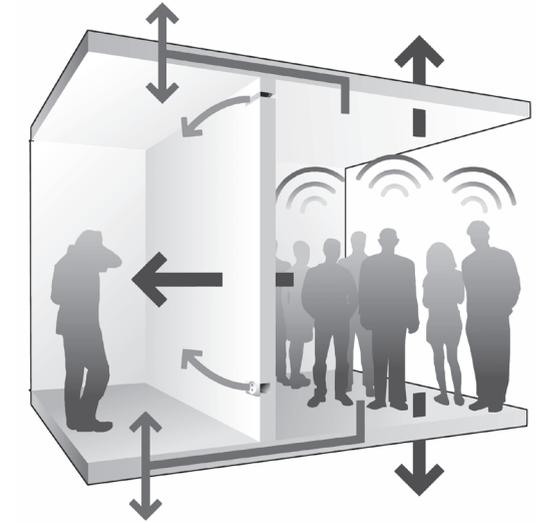
Design to provide acoustical comfort to building occupants through the use specific materials and systems.

Explore the specific needs of schools, residential spaces, healthcare facilities and gathering spaces.



HalfMoon Education Online Learning Architectural Acoustics – Design and Construction

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Examine fundamentals of sound outdoors and indoors

Study design and materials for sound control

Learn about practical techniques for controlling sound transfer in buildings

Discuss impacts of interior/ exterior walls, floors, ceilings and mechanical systems

Explore acoustical comfort in residential buildings, schools, healthcare and public gathering spaces

Continuing Education Credits

Professional Engineers

6.5 PDHs

Architects

6.5 HSW CE Hours

AIA

6.5 LU | HSW

Interior Designers

6.5 CE Hours

International Code Council

.65 CEUs (Building)



HalfMoon Education Inc.
WWW.HALFMOONSEMINARS.ORG

Faculty

K. Anthony Hoover, FASA, INCE Bd. Cert

Principal, MCH Acoustics and Media Systems Consultants

Mr. Hoover offers 38 years of acoustical consulting experience, serving as principal consultant on over 2,000 projects involving all building types and all areas of architectural acoustics. He has served as expert witness from Federal District Court to US Congressional Hearing. Mr. Hoover concurrently held faculty positions at Berklee College of Music and the Boston Architectural Center, and he has lectured at Harvard, MIT, Wentworth, Northeastern, Emerson, and SCI-Arc, and for AIA, ASHRAE, AES, USITT, and others. He has served in many leadership positions, chaired numerous technical sessions on architectural and musical acoustics, written and/or contributed to several textbooks, and received numerous design awards for architectural acoustics. He was honored with the 2019 Laymon N. Miller Award for Excellence in Acoustical Consulting, conferred annually/jointly by the National Council of Acoustical Consultants and the Institute of Noise Control Engineering.

Additional Learning

International Existing Building Code

- Mon., Feb. 22, 2021 | 8:30 am - 5:00 pm CST

Passive House: Planning and Design

- Tues., Feb. 23, 2021 | 8:30 am - 4:30 pm CST

Deep Foundations and Excavations

- Tues., Feb. 23, 2021 | 9:00 am - 5:00 pm CST

International Residential Code 2021

- Wed., Feb. 24, 2021 | 10:00 am - 2:30 pm CST

- Thurs., Feb. 25, 2021 | 10:00 am - 12:00 pm CST

Shallow Foundation

Design, Construction and Repair

- Wed., Feb. 24, 2021 | 11:00 am - 2:15 pm CST

- Thurs., Feb. 25, 2021 | 11:00 am - 2:15 pm CST

Complying with Fire Protection

& Building Codes

- Thurs., Feb. 25, 2021 | 8:00 am - 4:00 pm CST

Construction Scheduling

and Cost Control

- Thurs., Feb. 25, 2021 | 9:30 am - 2:00 pm CST

- Fri., Feb. 26, 2021 | 9:30 am - 2:00 pm CST

International Building Code 2021

- Fri., Feb. 26, 2021 | 9:00 am - 5:00 pm CST

Deep Excavations

- Thurs., Mar. 4, 2021 | 8:30 am - 4:30 pm CST

Parking Structure Design,

Construction and Maintenance

- Thurs., Mar. 11, 2021 | 8:30 am - 4:30 pm CST

SketchUp for Building Professionals

- Thurs., Mar. 11, 2021 | 11:00 am - 2:45 pm CST

- Fri., Mar. 12, 2021 | 11:00 am - 2:45 pm CST

2021 International Residential Code:

Residential Structural Design

- Fri., Mar. 12, 2021, 11:00 am - 3:30 pm CST

For more information

and other online learning opportunities visit:

www.halfmoonseminars.org

Continuing Education Credit Information

This webinar offers 6.5 PDHs to professional engineers and 6.5 HSW continuing education hours to architects licensed in all states.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider No. 5554646), Indiana (License No. CE21655559), Maryland, New Jersey (Approval No. 24GP55555655), North Carolina (S-5135), and North Dakota. 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 6.5 LU | HSW (Sponsor No. J885). Only full participation is reportable to the AIA/CES.

The International Code Council has approved this event for .65 CEUs in the specialty area of Building (Preferred Provider No. 1232).

This course offers 6.5 continuing education hours to interior designers. HalfMoon Education will not be seeking course approval in states that require preapproval. Refer to specific state rules to determine eligibility.

Completion certificates will be awarded to participants who complete this event, respond to all prompts, and earn a passing score (80%) on the quiz that follows the presentation (multiple attempts allowed).

Registration

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

Webinar Information

Log into Webinar 8:00 - 8:30 am CST
Break 11:45 am - 12:45 pm CST

Morning Session 8:30 - 11:45 am CST
Afternoon Session 12:45 - 4:30 pm CST

Tuition

\$289 for individual registration

\$199 for three or more registrants from the same company at the same time.

Included with your registration: PDF 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

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Cancellations: Cancel at least 48 hours before the start of the webinar, and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another webinar. You may also authorize another person to take your place.

Tuition

() **I will be attending the live webinar.** Single Registrant - **\$289.00**. Three or more registrants from the same company registering at the same time - **\$199.00** each.

Checks: Make payable to HalfMoon Education Inc.

Credit Card: *Mastercard, Visa, American Express, or Discover*

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