

AIA Continuing Education Provider



AIA/CES Approved Presentations



Architectural Resource

Continuing education in architecture is crucial to advancing & improving the profession.



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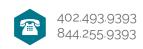
Markets are constantly changing. So keep up-to-date with the latest materials & systems.



Learn Educate

These presentations will help you elevate & cultivate your skills to design with the best products.







AIA/CES 1-HOUR PRESENTATIONS

SGH Concepts offers a diverse range of engaging AIA/CES approved 1-hour presentations to help educate, identify, and work with the many architectural products we provide.

To schedule a presentation for your group contact us at (402)493-9393 or email us at info@sghconcepts@gmail.com

Below, see our list of offered presentations, and their descriptions.

AIA/CES 1-HOUR PRESENTATIONS	PROVIDER	STATES
BACKUP WALL SYSTEMS		
Insulating Composite Backup Panels - A Simpler Solutions	Centria	NE, IA, MO, KS, CO, MT
Introduction to Pultruded FRP Façade Attachment Systems	Strongwell	NE, IA, MO, KS, CO, MT
Are Highly Permeable Membranes Too Permeable?	Vaproshield	NE, MO, KS, MT
INSULATED METAL PANEL SYSTEMS		
Building the Perfect Envelope with Insulated Metal Panels	Centria	NE, IA, MO, KS, CO, MT
Maximizing Envelope Performance with	Centria	NE, IA, MO, KS, CO, MT
IMP-Integrated Components		
RAINSCREENS		
Single Skin Metal Rainscreen	Dri-Design	NE, IA, MO, KS, CO, MT
How to Achieve Superior Building Envelope Performance	Centria	NE, IA, MO, KS, CO, MT
in Rainscreen Wall Design		
Single Skin Metal Panel Building Envelope Solution	Centria	NE, IA, MO, KS, CO, M
Fiber Cement Panels	SGH Concepts	NE, IA, MO, KS, MT
	Swisspearl	
DAYLIGHTING		
Sustainable Design Through Daylighting	Kalwall	NE, IA, KS, MT
Sustainable Design Using Highly Insulated	Structures Unlimited	NE, IA, KS, MT
Diffused Natural Daylight		
Innovative Daylighting Strategies for Commercial Buildings	SGH Concepts	NE, IA, KS, MT
- Intro to Tubular Daylighting Devices	Solatube	
Inspiring Applications of Tubular Daylighting	SGH Concepts	NE, IA, KS, MT
	Solatube	
Successful Daylighting for Wellness & Sustainable Design	SGH Concepts	NE, IA, KS, MT
	Solatube	
Inspiring Applications of Tubular Daylighting	SGH Concepts	NE, IA, KS, MT
in Educational Facilities	Solatube	
OPERABLE WALLS		
Revolutionizing Flexible Space with Automated	Skyfold	NE, IA, KS, MT
Operable Partitions		
Mastering Architectural Acoustics In Flexible Spaces	Skyfold	NE, IA, KS, MT
A Sound Decision - Acoustics & Operable Partitions	SGH Concepts	NE, IA, KS
	Modernfold	
Breaking The Fourth Wall - Modern Operable Wall Systems	SGH Concepts	NE, IA, KS
	Modernfold	
Through The Looking Glass	SGH Concepts	NE, IA, KS
- Moveable Glass Partition Systems	Modernfold	





BACKUP WALL SYSTEMS

INSULATING COMPOSITE BACKUP PANELS -A SIMPLER SOLUTION

CREDITS: 1 HR LU/HSW PROVIDER: CENTRIA



Description: The presentation explores exterior wall design performance; energy code requirements; the influence of air, moisture, thennal and vapor barriers; and actual project case studies are presented as an excellent option for building envelope weather barrier construction. This program will be an interactive session that encourages feedback and questions.

MAXIMIZING ENVELOPE PERFORMANCE WITH IMP-INTEGRATED COMPONENTS

CREDITS: 1 HR LU/HSW PROVIDER: CENTRIA



Description: Maximizing Envelope Performance with IMP-Integrated Components explores an advanced insulated metal composite panel building envelope system, components that have been engineered to integrate with the system - including windows, daylighting panels, sunshades, and louvers - and how the IMP system and integrated components combine to create a high-performance building envelope.





BACKUP WALLS SYSTEMS

INTRODUCTION TO PULTRUDED FRP FAÇADE ATTACHMENT SYSTEMS

CREDITS: 1 HR LU/HSW PROVIDER: STRONGWELL



Description: Architects, Engineers, and Designers who work with exterior cladding systems will receive an introduction to pultruded fiber-reinforced polymer (FRP) composites and their characteristics as structural building materials. Using this information, session participants will be able to demonstrate how FRP girts can be used for a cladding support structure and simultaneously create a thermally efficient wall. Participants will be able to define continuous insulation (CI) systems per ASHRAE 90.1 and differentiate FRP CI systems vs. traditional steel girt systems. Finally, participants will be able to obtain the necessary design resources to integrate FRP CI systems in future projects.

Learning Objectives:

- Describe the beneficial characteristics of pultruded fiber-reinforced polymer (FRP) composites used as building materials, including how this will impact the user's experience living/working in the building.
- Identify the relevant codes and standards that apply when using FRP as a building material and discuss their application in common architectural designs.
- Demonstrate how FRP girts can be used for a cladding support structure and simultaneously create a thermally efficient wall, and specifically address how this benefits occupants of the building.
- Obtain and utilize the necessary design resources to integrate FRP CI systems in future projects to foster increased efficiency and longevity of structures for building owners and occupants.

ARE HIGHLY PERMEABLE MEMBRANES TOO PERMEABLE?

CREDITS: 1 LU HOUR/ 1 IIBEC CEH PROVIDER: VAPROSHIELD



Description: This comprehensive course offers a fresh look on how increased permeability in water resistive barriers will enhance wall assembly performance for the life of the building.

- Define what permeance is and how it is tested.
- Understand wall assembly drying mechanisms.
- Show the benefits of permeable assemblies.
- Illustrate the differences between vapor tight and highly permeable WRB membranes in relation to water intrusion of a wall assembly.





INSULATED METAL PANEL SYSTEMS

BUILDING THE PERFECT ENVELOPE WITH INSULATED METAL PANELS

CREDITS: 1 HR LU/HSW PROVIDER: CENTRIA



Description: Understanding building physics is critical to proper building envelope design. Examined here are practical concepts for the building designer, including how cladding systems perform across different climate zones and applications. Environmental control layers and hygrothermal loads are reviewed, as is the concept of perfect/universal wall design. The course focuses on how single-component insulated metal panels (IMPs) function as a perfect/universal wall, simplifying wall system design and installation.





RAINSCREENS

SINGLE SKIN METAL RAINSCREEN

CREDITS: 1 HR LU/HSW PROVIDER: SGH CONCEPTS DRI-DESIGN



Description: This course compares exterior wall metal cladding systems and takes an in-depth look at the design options, testing, specifications, environmental implications, and the detailing of single-skin metal panel systems as used in a pressure-equalized rainscreen (PER) application.

Learning Objectives:

- Comparing Performance attributes of different types of metal cladding.
- Determine how metal panels can protect structural components of a building.
- Identifying testing methods for rainscreen systems.
 How to improve the energy efficiency of a wall system.
- Specifying a metal panel with a suitable finish for single skin metal panel to meet a building's projected cost and maintenance life cycle needs.
- Project Case Studies.

SINGLE SKIN METAL PANEL **BUILDING ENVELOPE** SOLUTION

CREDITS: 1.25 HR LU / HSW PROVIDER: CENTRIA



Description: As part of a well-designed rainscreen system, single-skin metal panels offer unique aesthetic options combined with the assurance that the building envelope will withstand the effects of long-term exposure to the elements. This course compares common cladding types; presents single-skin metal panel materials, coatings, finishes, and design options; and examines using single-skin metal panels with a single-component barrier wall to form a complete rainscreen assembly.





RAINSCREENS

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HOW TO ACHIEVE SUPERIOR
BUILDING ENVELOPE
PERFORMANCE IN
RAINSCREEN WALL DESIGN

CREDITS: 1 HR LU/HSW PROVIDER: CENTRIA



Description: The course will compare and contrast the common multicomponent backup wall assembly with the single-component insulated metal composite backup wall system, and demonstrate how the later overcomes deficiencies of the fernier in creating a building envelope with superior perfonnance as well as other key benefits.

- How to achieve superior building envelope perfonnance in rainscreen wall design explores rainscreen wall design theory.
- How rainscreen walls control hygrothermal loads.
- shortcomings of today's multi-component backup wall assemblies used in rainscreen wall construction.

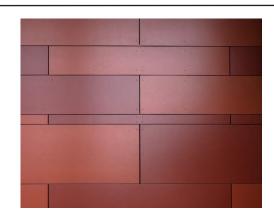




RAINSCREENS

FIBER CEMENT PANELS

CREDITS: 1.0 HR LU / HSW PROVIDER: SGH CONCEPTS **SWISSPEARL**



- Describe the many product choices and options available in fiber cement panels.
- Summarize the test standards met by high performing fiber cement panels.
 List the components of a ventilated rainscreen system and identify how each contributes to reliable thermal performance and reduced energy consumption.
 Discuss the fiber cement panel life cycle which makes it an excellent choice for
- sustainable design.
- Discuss steps of preliminary design with fiber cement panels and how the ventiliated facade system should be planned with drawings, especially the sub framing and panel layout.
- Discuss the safety measures taken when handling and installing fiber cement panels.





DAYLIGHTING

SUSTAINABLE DESIGN THROUGH DAYLIGHTING

CREDITS: 1 HR LU/HSW PROVIDER: KALWALL



Description: Topics discussed include daylighting strategies available through the integration of structural sandwich panels, energy conservation, enhancements, options, form and aesthetics. The many benefits to health, productivity, safety and sustainable design will be discussed, as well as specialty applications including explosion venting, blast resistance, OSHA fall through protection and hurricane resistance.

SUSTAINABLE DESIGN USING HIGHLY INSULATED DIFFUSED NATURAL DAYLIGHT

CREDITS: 1 HR LU/HSW PROVIDER: STRUCTURES UNLIMITED, INC.

Learning Objectives:

• Participants leave with the ability to understand the health, safety, productivity, protection and aesthetic benefits of Natural daylighting in occupied spaces.

• Understand the benefits to the occupants of a space with diffused sunlight (no glare) instead of direct sunlight (glare).

• Participants will gain understanding of how Natural Daylight improves occupant's attendance productivity and health.

• Undertanding the benefits of designing with low solar heat gain to lower the energy costs of cooling and high insulation properties benefiting the efficiency of heating of the building.

• Participants will also learn about safety of providing a daylighting material, which can meet OSHA fall through, windborne debris, blast resistance and

explosion venting protection.





DAYLIGHTING

INNOVATIVE DAYLIGHTING STRATEGIES FOR COMMERCIAL **BUILDINGS - INTRO TO** TUBULAR DAYLIGHTING **DEVICES**

CREDITS: 1 HR LU/HSW

1 HR GERNERAL CE PROVIDER: SGH CONCEPTS

SOLATUBE



Description: Learn about the latest advanced optical daylighting technology and the product category Tubular Daylighting Devices (TDDs) which make daylighting a space as easy as applying traditional lighting equipment.

INSPIRING APPLICATIONS OF TUBULAR DAYLIGHTING

CREDITS: 1 HR LU/HSW PROVIDER: SGH CONCEPTS

SOLATUBE





CREDITS: 1 HR LU/HSW

1 HR GENERAL CE

PROVIDER: SGH CONCEPTS

SOLATUBE



Description: Expand your awareness of the advantages of daylighting using Tubular Daylighting Devices (TDDs) that contribute to wellness and sustainable design. You will learn the importance of natural light to humans, the role TDDs can play, and the resources available for achieving sustainable design goals.





DAYLIGHTING

INSPIRING APPLICATIONS OF TUBULAR DAYLIGHTING IN EDUCATIONAL FACILITIES

CREDITS: 1 HR LU/HSW

1 HR GERNERAL CE

PROVIDER: SGH CONCEPTS

SOLATUBE



Description: Discover how tubular daylighting devices (TDDs) can be implemented in inspiring and innovative ways to meet aesthetic and functional design goals in educational settings. From sustainably-built, green schools to life-saving facilities such as tornado and hurricane shelters, TDDs can add perfect, broad-spectrum daylight while supporting the unique design vision of architects and designers in the educational environment.





REVOLUTIONIZING FLEXIBLE SPACE WITH AUTOMATED OPERABLE PARTITIONS

CREDITS: 1 HR LU/HSW PROVIDER: SKYFOLD



Description: Have you thought about incorporating automated and acoustic operable partitions into your flexible space design plans, but have struggled with the design concept, planning and choosing a solution? Then this is the class for you.

Learning Objectives:

- Recognize the advantages of automated flexible space to manage spaces more efficiently and effectively.
- Compare and contrast three types of automated operable partitions.
- Understand acoustic separation as it relates to flexible spaces and automated operable partitions.
- Understand storage and structural considerations.
- Discover the impact of automated operable partitions on overall design.
- Understand the overall cost implications (initial and lifecycle).

MASTERING ARCHITECTURAL ACOUSTICS IN FLEXIBLE SPACES

CREDITS: 1 HR LU/HSW PROVIDER: SKYFOLD



Description: There are many acoustical considerations when designing flexible spaces that do not sacrifice privacy and comfort, especially when integrating operable partitions into these spaces. This course explores acoustics in the built environment (also known as "invisible architecture") and its effects on well-being, health, safety and productivity, as well as an overview of the WELL Building Institute's acoustical comfort recommendations.

- Understand what sound is and how it behaves in an interior environment.
- Learn how building materials are classified for their sound control capabilities.
- Learn about acoustical challenges in flexible spaces with an without operable partitions.
- Discover how best to control sound.
- Find solutions for noise control through automation and intelligent acoustical design.





A SOUND DECISION - ACOUSTICS & OPERABLE PARTITIONS

CREDITS: 1 HR LU/HSW CE PROVIDER: SGH CONCEPTS MODERNFOLD



Description: Acoustical control is a critical factor in virtually every type of environment; therefore, selection of the appropriate operable partition is critical. It is important when choosing an operable wall system to not only consider the space and configuration of your application and how the wall operates, but to also examine the wall's acoustical performance. We discuss the right wall system, in conjunction with complementing architectural elements, to help produce excellent acoustical control.

Learning Objectives:

• Identify the ways acoustics can be measured and how high acoustic levels can affect the physical, mental, and social health of occupants.

• Illustrate how operable partitions can be used to reduce sound transmission and create multiple configurations that are quiet and effective for a variety of users.

• Analyze field sound tests used to ensure materials and products comply with standards and guidelines for safe acoustical levels in various applications.

• Discuss how operable partitions can help projects apply for LEED category credits that guide design professionals in creating spaces that allow occupants to live and work in peace.





BREAKING THE FOURTH WALL
- MODERN OPERABLE
WALL SYSTEMS

CREDITS: 1 HR LU/HSW CE PROVIDER: SGH CONCEPTS MODERNFOLD



Description: From simply reconfiguring a room to completely changing how it is entered and exited, operable wall partition systems make rooms more efficient and maximize space by implementing superior technologies. We'll go beyond the basics of operable partitions to address layout, operating clearances, panel construction, and acoustical elements. By the end of this course, design professionals will learn how these components work together to impact a project's environment in term of health, well-being, and space management.

Learning Objectives:

• Define operable wall systems and discuss how they can improve occupants' wellbeing by implementing space flexibility and daylighting through various panel configurations.

• Compare and contrast the different suspension systems available for use with

operable partitions.

• List the various types of acoustical seals that can be used with operable partitions in order to improve occupants' health and wellbeing in multi-use spaces.

• Identify safety considerations of operable partitions, including stopping electric partitions, protecting spaces from fire, and ensuring appropriate clearances





THROUGH THE LOOKING GLASS - MOVABLE GLASS PARTITION SYSTEMS

CREDITS: 1 HR LU/HSW CE PROVIDER: SGH CONCEPTS MODERNFOLD



Description: One of the best ways to craft unique and welcoming environments is by adding openness and natural light to a space. Join us in this one-hour course as we discuss utilizing glass operable walls to facilitate natural light and views in a variety of applications to meet the diverse needs of different markets. By the end of this presentation, you will be able to identify features and benefits of glass operable wall systems, especially increased social and emotional well-being for occupants and increased sustainability.

- Identify the need for natural light and views in the workspace, describing their ability to improve the emotional and social health of occupants.
- Compare and contrast glass operable wall systems, especially in their ability to contribute to LEED category credits.
- Discuss the characteristics and benefits of glass operable walls, especially suspension systems that ensure occupants and operators are kept from physical harm.
- Illustrate how glass operable walls can be used in a variety of applications to meet the diverse needs of different markets.