CONTINUING EDUCATION IN BUILDING SCIENCE

A Library of Continuing Education Units Approved by the American Institute of Architects (AIA), International Institute of Building Enclosure Consultants (IIBEC) and /or U.S. Green Building Council (USGBC).

TREMCO

Construction Products Group

AIA Continuing Education Provider

EDUCATION PARTNER

CONTINUING EDUCATION IN BUILDING SCIENCE

Tremco Construction Products Group companies offer a library of Continuing Education Units (CEUs) approved by the American Institute of Architects (AIA), International Institute of Building Enclosure Consultants (IIBEC) and /or U.S. Green Building Council (USGBC). Programs discuss technical advances and construction practices that can help achieve greater building performance, sustainability and energy requirements.

You can also watch many courses on-demand to earn credits. Available courses are indicated by the ▸ symbol. To view the library of on-demand courses, **click here**.

To request a lunch & learn presentation, contact your local representative through our rep locator at ***TREMCOSEALANTS.COM***

CATEGORY	COURSE TITLE	COURSE NUMBER	CREDIT HRS/TYPE	DESCRIPTION
AIR BARRIERS	Fluid-Applied Air Barrier Tech, Challenges, and Performance	TRS072	1 AIA LU/HSW	This program examines the importance of air barriers in construction. There will be a deep dive into the increasing requirements of air, water, vapor, and thermal controls to improve a buildings performance. With a focus on fluid-applied air barrier membranes, also learn how technologies and installation are challenged and effect on performance.
	▸ Prefabrication Trends in Particular Factory-Applied Air Barriers	TRS089	1 AIA LU/HSW	Commercial Construction today is all about reducing waste. Whether its time or energy, commercial construction has been designed around efficiency. Pre-fabrication of the air barrier membrane can decrease the time needed during construction without compromising performance. This presentation will go through the benefits involved in the prefabrication, things to look out for when evaluating and selecting these systems, and give insights on connectivity choices when it all comes together on the jobsite.
	▸ Air Barrier Testing in Review	TRS048	1 AIA LU/HSW	A presentation that discusses the different standards that are involved in evaluating air barrier membranes. This course will go over the test methods, modifications to relate to real world applications, and recommend other testing that can be performed to understand long term durability and performance.
BUILDING ENCLOSURE	▸ Providing Owners What They Really Want: Leak-Free Buildings, Through Performance Specifications	TRS046	1 AIA LU/HSW	In this course we will dive into how to produce and provide performance specifications that meet the owners' expectations, maximize the success of the design and construction teams, and reduces risks for all three parties of the design team (owner, architect, & construction team). We will discuss how to provide a performance specification that is clear, concise and comprehensive yet simple and targeted to achieve what the owner really wants – a leak free building that performs!!
	Planning for Compressed Construction Timelines Post COVID-19	TRS067	1 AIA LU/HSW 1 IIBEC CEH	You may have experienced delays on your construction project due to weather, supply issues or with the recent shutdowns due to COVID-19. But advanced technologies in the construction market are available to help get projects back on track when these delays occur—without compromising performance. In this course, we will examine specific product technologies and services that can help speed and simplify installation not only for projects that are in delay, but also for on-time projects to be completed early. This can have serious ramifications, for example, when it means a community can open a hospital several months earlier. The course will also discuss solutions available that can extend the construction season, allowing work to continue during inclement weather.
	Building Enclosure Codes, Standards, and Building Science	TRS087	1 AIA LU/HSW	Understand how changes in how we Build has changed the dew point location of our Exterior Walls which requires the need for new codes, standards and building science. Review Exterior Wall Failures and discuss their causes Learn about the most common standards and codes for energy efficiency, durability and high performing buildings. Review current common ASTM and AMAA Standards for in Situ / on the Building validation testing.
FIRESTOPPING	Fire Stopping: History, Systems and Technology	TRS091	1 AIA LU/HSW	This course reviews the importance of firestopping, the history of and what technology is available. Review the system approach and testing
GLAZING	▸ Restoring Glazing System Performance without Sacrificing Aesthetics	TRS045	1 AIA LU/HSW	This course will look at restoring glazing system performance without sacrificing the aesthetics of your building. The course will discuss failed joints in vertical construction, enhancing the aesthetics of your building, restoring skylights, and maintaining the look of historic buildings.
SEALANTS	Sealant Selection	TRS085	1 AIA LU/HSW	This course will review the different sealant chemistries and the part that they play in selecting a sealant. We will discuss the importance of proper joint design along with sealant failures and why they occur. This course also answers a variety of questions around choosing the right product.
	Fundamentals of Joint Design/Joint Sealants	TRS049	1 AIA LU/HSW	This course will review the process associated with design, specification and installation of joint sealants for high performance building enclosures. Course outlines benefits related selection of proper sealants for the vertical and horizontal joints subject to movement.
	The Critical Role Sealant Selection Plays in Your Project	TRS063	1 AIA LU	For every component, accessory, and substrate on your project it is important to understand sealant performance. It has been shown that it is not as simple as grouping sealant chemistries together, and assuming results. Vast differences have been reported within chemistry classifications. Further, it is important to understand both adhesion and compatibility for all these interfaces related to sealant application. Testing must be done for each of these interfaces.
	▸ Hybrid Sealant Technology Basics	TRS058	1 AIA LU/HSW	This presentation reviews Hybrid Sealant Technology, and, distinguishes the differences between compressed sealant technology, traditional sealant, self-leveling and gland sealant systems. Applications and areas of use are reviewed for industrial and/or commercial environments. Topics such as fire resistance, design, performance technology, surface preparation, installation techniques and engineering details are presented.

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WALL COATINGS	Weatherproofing Concrete and Masonry Walls	TRS055	1 AIA LU	This course will discuss the imporatnace of a wall coating on your building and the negative affects you culd encounter without one. Isuees caused by water infiltration have lasting effects on the performance and aesthetics of your building. There are many options out on the market and this course will explain the pros and cons of these technologies. The performance criteria and necessary steps to ensure a quality job are key when selecting a wall coating product
WATERPROOFING	Waterproofing Connectivity Solutions	TRS077	1 AIA LU/HSW	The presentation is a current overview of waterproofing technologies, the connections between the different waterproofing systems, and what key specifics to consider when developing a waterproofing specification. Additionally, the presentation reviews the current product trends within the waterproofing industry.
	Below-Grade Waterproofing Applications, Technologies & Risk-Mitigation	TRS084	1 AIA LU/HSW	Learn the most common below-grade installations and technologies that can be used in these applications, common reasons for membrane failure and risk mitigation practices.
	Minimizing Risk in Blindside Waterproofing Applications	TRS062	1 AIA LU/HSW	While blindside waterproofing is becoming more prevalent due to congested construction and zero lot lines, they also result in challenges that require significant attention to detail. This course will identify blindside waterproofing product technologies, their differences, the criteria for product performance, and how to design a waterproofing system accordingly. Best practices for mitigating application risks and managing critical areas prone to moisture infiltration will be reviewed, including the sequence of installation and for detailing failure points.
	▸ Stop Water Intrusion and Make Your Building Enclosure Perform Like New	TRS065	1 AIA LU 1 IIBEC CEH	This presentation will feature case studies of water intrusion on actual projects; we will describe the investigation of existing facade, roof, and parking structure assemblies that included coatings, membranes, sealants and detailing, and the condition/performance of each. For each identified water intrusion issue, we will walk through the variety of solutions along with their challenges and benefits. We will select a solution for each issue and provide step-by-step guidance on the installation and application.
	▸ Build Better at Lower Cost by Controlling Infiltration	TRS066	1 AIA LU	This presentation discusses the impact of reduced air infiltration on energy use and the moisture dynamics that determine whether or not a residential or light commercial building is "too tight". Learn how lowering air infiltration compares to other alternatives for lowering energy use, including increased insulation values and reduced window U-values.
WATERPROOFING /COATINGS	▸ PMMA/PUMA Technology	TRS090	1 AIA LU/HSW	This course is a discussion about the use of PMMA/PUMA technologies in the construction industry. This presentation exhibits key physical properties and the performance/benefits that they provide to the end user. Typical installation procedures recommended will be reviewed by for most common applications â€" vehicular coating and below-grade waterproofing.
EXTERIOR INSULATION & FINISH SYSTEMS*	Continuous Insulation and Air Barriers for High Performance Framed Wall Assemblies	DRY003	USGBC / GBCI / LEED 1.0 LU	Recent changes to Energy Codes such as the International Energy Conservation Code (IECC) and Energy Design Guidelines such as the ASHRAE Standard 90.1 are substantially increasing requirements for continuous insulation (ci) and air barrier integration into building envelope walls. This program examines all IECC and IBC 2012 code criteria that influence the design and construction of building envelope framed walls as well as the challenges associated with the integration of continuous insulation (ci) behind traditional veneer claddings such as increased wall thickness and support structure, there direct increase to code of construction as well as the coordination of air barrier compatibility and overall code defined fire performance requirements.
	"Barriers" to Achieving a Code Compliant Building Envelope Wall Assembly	DRY004-HSW	1 AIA LU/HSW	Recent changes to the 2012 and 2015 International Building Code (IBC) and International Energy Conservation Code (IECC) have substantially raised the bar toward the development of high-performance building envelope framed wall assemblies. These current or soon to be adopted code now require the integration of the following four (4) primary "Barriers" with a framed wall assembly: Water-Resistive, Air, Vapor Retarder and Thermal. This program explores the four (4) barrier code criteria, outlined their requirements and placements in the famed wall assembly and examines specifically the challenges associated with their integration and compatibility.
	Advancements in EIFS for Today's Building Envelope Design Challenges	DRY005-HSW	1 AIA LU/HSW	This program specifically examines the major advancements in Exterior Insulation and Finish Systems (EIFS) which specialty address the many challenges associated with today's building envelope design, construction and performance. EIFS solution today offer tremendous versatility for system type, durability and aesthetic value along with diversity for use in new commercial or residential, restoration, renovation and modular / panelized constructions as a single specification source for continuous insulation (ci), air/water-restive barrier (awrb) and NFPA 285 fire testing compliance.
	EIFS 101: An Intro to Exterior Insulation & Finish Systems	DRY006-HSW	1 AIA LU/HSW	This presentation serves as an introduction to Exterior Insulation and Finish Systems (EIFS) as a single source exterior insulated cladding solution ideal for commercial or residential, new and retrofit construction.
	▸ The Evolution of Brick – A New Insulated Masonry Veneer	DRYNB1-HSW	1 AIA LU/HSW / USGBC / GBCI / LEED 1.0 LU	This program introduces a new Lightweight Insulated Brick Veneer cladding option which is applicable to all construction types and market segments. This lightweight insulated brick veneer incorporates the size, shape and scale of traditional clay or thin brick while most importantly retaining the classic and often desired aesthetic appearance of brick.
	Achieving a Comprehensive Building Envelope Wall Renewal Program	DRYRV1	1 AIA LU/HSW	Today, there is an enormous stockpile of existing, outdated and energy 'inefficient' buildings – both occupied and unoccupied – which are impacting curb appeal, diminishing occupant comfort and reducing financial return. Through the goals of improved resiliency and sustainability with reduced environmental impact, there is increasing sensitivity toward existing building RENEWAL as opposed to existing building replacement.
	▸ Raise Expectations of Continuous Insulation & Air Barrier Systems	TRS075	1 AIA LU/HSW	Learn about current construction industry trends and how they have influenced the innovation of continuous insulation and air barrier products. It gives an overview of continuous insulation and air barrier fundamentals, compatibility, use in off-site and in-field construction, long-term performance, whole system testing, and whole system warranties.
	Prefabricated EIFS-Clad Panel Assemblies	TRS092	1 AIA LU/HSW	This course addresses in detail the characteristics of prefabricated EIFS panel systems and differences compared to typical field installed EIFS. Three primary prefabricated EIFS panel types are discussed including the advantages of each, as well as typical design considerations for a panelized construction approach.

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* Presented by Dryvit Systems, Inc., part of the Tremco Construction Products Group.

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INSULATED CONCRETE FORMS (ICF)**	▸ An Introduction to Insulated Concrete Forms	0704	1 AIA LU	This program is designed to give participants an overview of the features, benefits and advantages of Insulated Concrete Forms as a better alternative for a building envelope. Such topics as thermal mass performance, fire resistance ratings, and sound attenuation performances are some of the key items discussed within this presentation. Additional discussions also covered are building types, environmental, design and construction benefits along with the basic installation techniques associated with this type of construction. Additionally, they will gain knowledge on various building codes and how ICF's are incorporated into these codes across the country.
	General Commercial Buildings with Insulated Concrete Forms	0705	1 AIA LU	This program is designed to give participants a general overview of building commercial buildings with Insulated Concrete Forms ICF and show the benefits that they can provide during the design and construction phase. The course will also highlight the benefits to the building occupants and owners.
	Multi-Story Buildings Overview with Insulated Concrete Forms	0706	1 AIA LU	This program is designed to give participants a general overview of building Multi-Storey structures with Insulated Concrete Forms ICF and show the benefits that they can provide during the design and construction phase. The course will also highlight the benefits to the building occupants and owners. The program will also touch on the fire rating advantages and the speed of construction compared to traditional building methods.
	Building Educational Facilities with Insulated Concrete Forms	0707	1 AIA LU	This program is designed to give participants a general overview of building Educational structures with Insulated Concrete Forms ICF and show the benefits that they can provide during the design and construction phase. The course will also show how building with Insulated Concrete Forms will optimize energy performance, saving school boards on energy costs. The program also touches the health benefits that can be gained.
	Hospitality Facilities - Building with Insulated Concrete Forms	0708	1 AIA LU	This program is designed to give participants a general overview of building Hospitality Facilities with Insulated Concrete Forms ICF. The program will show how building with Insulated Concrete Forms will optimize energy performance, reduce building maintenance costs and reduce mould growth.
	Medical Facilities Overview with Insulated Concrete Forms	0709	1 AIA LU	This program is designed to give participants a general overview of building Hospitality Facilities with Insulated Concrete Forms ICF. The program will show how building with Insulated Concrete Forms will optimize energy performance and provide healthier indoor air quality for building occupants.
	Nudura One Day Insulated Concrete Forms - ICF Training Course	211111	8 hour / 5 AIA LU	This 8 hour course gives the attendee the basic installation knowledge of Nudura Integrated Building Technology. Covers installation techniques, lintel design, reinforcing placement, concrete placement, mechanical installations, interior & exterior finishes and provides live demonstrations which allows for class involvement.

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** Presented by Nudura Inc., part of the Tremco Construction Products Group.

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Tremco Construction Products Group brings together the Commercial Sealants & Waterproofing and Roofing & Building Maintenance divisions of Tremco CPG Inc.; Nudura Inc.; Prebuck LLC; Willseal; Weatherproofing Technologies, Inc.; Weatherproofing Technologies Canada, Inc.; Pure Air Control Services, Inc.; and Tremco Barrier Solutions, Inc.

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