

CONTINUING EDUCATION

CENTRIA AIA COURSES

CAS 283

Maximizing Envelope Performance with IMP-Integrated Components

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.

*AIA CREDITS – 1LU / HSW Hour

CAS 284

Building the Perfect Envelope with Insulated Metal Panels

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.

*AIA CREDITS – 1LU / HSW Hour

CAS 285

How to Achieve Superior Building Envelope Performance in Rainscreen Wall Design

How to achieve superior building envelope performance in rainscreen wall design explores rainscreen wall design theory, how rainscreen walls control hygrothermal loads, and shortcomings of today's multi-component backup wall assemblies used in rainscreen wall construction. The course will compare and contrast the common multi-component backup wall assembly with the single-component insulated metal composite backup wall system, and demonstrate how the later overcomes deficiencies of the former in creating a building envelope with superior performance as well as other key benefits.

*AIA CREDITS – 1LU / HSW Hour.

CAS 286

Data Center Design Using Insulated Metal Panels

This course focused on the design considerations of Data Centers and incorporation of insulated metal panels to achieve superior building performance. Topics include supporting structure design including allowable spans, environmental control layers (air, water vapor and thermal) code requirements and fire safety building regulations. How insulated metal panels (IMPs) are used in the HVAC design and function as a "Perfect/Universal" wall system throughout the building.

*AIA CREDITS – 1LU / HSW Hour.

CAS 287

Fire Code Compliance and Insulated Metal Panels

Understanding how insulated metal panels comply with fire safety regulations under the code are critical to their proper use in creating highly energy efficient and sustainable buildings. This course takes a relatively complex subject and addresses the most important fire safety related aspects to allow building designers to make an informed decision on the use of these popular cladding systems. We will review how these products have been addressed in the development of the International Building Code, including their applications in both combustible and non-combustible structures as well as single and multi-story construction. The program will conclude with a look at the various third-party product listings, evaluation reports and engineering judgements used to evidence compliance with the International Building Code.

*AIA CREDITS – 1LU / HSW Hour

CAS 288

Insulating Composite Back-up Panels – A Simpler Solution

The presentation explores exterior wall design performance; energy code requirements; the influence of air, moisture, thermal 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.

*AIA CREDITS – 1LU / HSW Hour

CAS 291

Modular Metal Panel Systems – Understanding the Benefits of Modular Metal Panel Systems

This program covers the history and attributes of Modular Metal Panels. Participants will learn the advantages of MMP's and how they allow for an array of different designs due to the wide availability of panel sizes, planes, and layout configurations. Manufacturing innovations, available substrates, ease of installation and comparisons to other products will also be covered. The program ends with multiple projects photographs and case studies to show customizable design concepts.

*AIA CREDITS – 1LU Hour

CAS 292

Single Skin Metal Panel Building Envelope Solution

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.

*AIA CREDITS – 1LU / HSW Hour