AIA Course Content

AEC357 Exterior Appeal: Technical and Environmental Considerations of Residential Siding
Course Number: LPSS01

1 Credit Hour AIA/CES, HSW

This course provides an overview of residential siding in the United States with a focus on the history of the different types of residential siding, their environmental impact, and their installation techniques.

The course teaches:

- The various types of residential siding, their origins, functions, and features such as durability and performance
- The energy efficiency and environmental impact of residential siding options and which types are best suited to green building programs
- The proper installation of treated engineered wood siding products and their curb appeal benefits

AEC386 Preventing Callbacks with Enhanced OSB Sub-Flooring
Course Number: LPSUB1

1 Credit Hour AIA/CES, HSW

This course focuses on preventing callbacks through a superior understanding of structural sub-floor panels. It includes the evolution of sub-flooring and an in-depth comparison of modern sub-flooring materials based on performance and environmental considerations.

The course teaches:

- The advantages and disadvantages of various sub-flooring approaches
- How plywood and OSB are manufactured and how they differ in terms of raw materials and structure
- The problems that arise when structural sub-flooring panels receive insufficient attention during design and/or construction

AEC290 Engineered Wood Products for Specifiers
Course Number: 00EWPE

1 Credit Hour AIA/CES, HSW

This course serves as an introduction to engineered wood products for specifiers, providing an overview of engineered wood products (EWPs), including the manufacturing processes for various products, their cost-effective applications, ease of installation, and design and performance criteria.

The course teaches:

- Basic to advanced wood product information and applications as well as terminology associated with EWPs and how these products compare to traditional lumber in beam and header applications
- I-joist performance in an engineered wood floor system
- The material and resource efficiency of EWPs

AEC334 Tall Wall Design Using Engineered Wood Products
Course Number: LPEWT1

1 Credit Hour AIA/CES, HSW

This course offers an introduction to designing tall walls (over 10 feet) for entryways using engineered wood products like LSL and laminated veneer lumber (LVL).

The course teaches:

- The steps involved in working with studs, headers and columns using engineered wood products in the design of tall wall entryways
- AC202 Code Acceptance Criteria
- The effects of deflection and lateral wind on walls

AEC330 Radiant Barrier Structural Roof Sheathing
Course Number: LPTS01

1 Credit Hour AIA/CES, HSW

This course serves as an introduction to the features, benefits and uses of radiant barrier sheathing, including how and why radiant barriers work, installation, and energy savings.

The course teaches:

- Forms of heat transfer
- Information about radiant barriers and their function as well as specific key installation methods
- The nature of the benefits of a radiant barrier

AEC613 Meeting Fire Codes with OSB
Course Number: LPFRS11

1 Credit Hour AIA/CES, HSW

This course provides an overview of fire-rated cementitious coated OSB (FRCC OSB) sheathing for wall and roof sheathing applications in terms of its structural and performance properties.

The course teaches:

- The components and physical attributes of fire-rated cementitious coated (FRCC) OSB sheathing and how this material can be used to meet building code requirements while reducing labor costs and construction time
- Applicable building design and code requirements as well as approval and testing standards relevant to FRCC OSB sheathing
- Common construction applications relevant to FRCC OSB sheathing

AEC498 Framing Solutions: Laminated Strand Lumber When Strength, Stiffness, and Straightness Matter
Course Number: LPLSL1

1 Credit Hour AIA/CES, HSW

This course provides an overview of laminated strand lumber (LSL), including the manufacturing process, its cost-effective applications, ease of installation, and design and performance criteria.

The course teaches:

- The features and benefits of using LSL as a whole house structural framing member in comparison with traditional and other structural lumber composites
- The material and resource efficiency of EWPs and the life-cycle assessment rankings of wood
- The manufacturing process of LSL in terms of its energy efficiency and utilization of wood