

AIA Presentations

- 1. Arktura: Design for Manufacturing 2
- 2. Lumicor: Architectural Resin Solutions for Light, Color, and Pattern
- 3. Trespa: Designing a Cost Effective Rainscreen Façade with HPL
- 4. G&S Acoustics: Science Behind Sound & Acoustics
- 5. GKD Metal Fabrics: Enhancing the Build Environment with Architectural Metal Fabric

^{*}Please see below to find descriptions of all of these courses

DESIGN FOR MANUFACTURING 2 – CASE STUDIES

Provider # 40107473

Arktura is a Los Angeles-based design and manufacturing company with a highly unique vision: we believe that great design is achieved with close integration to modern manufacturing processes. This core thinking drove the evolution of our firm from the original vision of three architects sharing a passion for infusing beautiful forms with cutting edge technologies. It has fueled Arktura to grow in to an industry-leading partner accommodating cutting edge architectural and design manufacturing assignments that now span the globe.

Whether sculpting, bending, folding or perforating a range of materials from metal to glass to wood or something far beyond, Arktura is ultimately crafting design solutions that elevate and inspire the worlds where people live, work and play. Our Architectural division offers a truly unique line of highly flexible systems across ceilings, feature walls and exterior facades. Our Furniture division challenges the form of realized functional furniture through use of complex software and manufacturing processes to achieve truly unique beauty. Arktura's Solutions Studio team supports the unique visions of architects and designers to help them achieve new design results while leveraging our unparalleled knowledge across a range of custom assignments.

At Arktura, we understand the world of architecture and design —the goals, the process, the mechanics and the art. In fact, we were founded on this understanding. In everything we do we strive to push the envelope further while envisioning and creating spaces that define purpose, transform function, and exceed everyday expectations. In short, we like to think of ourselves as the architect's architect, the engineers of design or, more precisely, the fabricators of possibility. Through our unique lens of design-manufacturing we will share our experiences of how we are leading advancements in architectural products through the use of cutting edge technologies to create meaningful and impactful results for the design marketplace.

LEARNING OBJECTIVES

- 1. Digital collaboration understanding capabilities
- Convergence of Traditional & Digital Tools
- 3. Design Development based on materials, finishes and applications
- 4. Understanding how to design for specific manufacturing processes.
- 5. Understanding/Analyzing cost ramifications as they pertain to manufacturing
- 6. Project Budgets how to VE without losing Impact





ARCHITECTURAL RESIN SOLUTIONS FOR LIGHT, COLOR, & PATTERN



Course Description: Architectural resin panels are engineered to suit the demands of a wide array of interior and exterior applications and offer almost unlimited combinations of color, pattern, and design. This course presents the features and options that allow resin panels to meet design requirements for both function and beauty, and discusses how resin panels may play a role in projects seeking LEED® Living Building Challenge® or WELL Building Standard® Certification.

TRESPA

COURSE NAME: DESIGNING A COST EFFECTIVE RAINSCREEN FACADE WITH HPL

COURSE CREDIT: 1

COURSE: AIA/HSW Approved

LOCATION: Live

COURSE PROVIDER NUMBER: 404108890

COURSE NUMBER: 404108893

COURSE DESCRIPTION:

This course is meant to be a CEU for architects and designers. It focuses on designing a cost effective rainscreen facade with high pressure laminates. It goes over what is a HPL system, Rainscreen Overview, Cost Factors, Strategies and Inspiration.

LEARNING OBJECTIVES:

- What is a High Pressure Laminate in the Rainscreen/Facade world
- Overview on Rainscreens and Benefits
- Cost Factors for such materials
- Strategies and Inspiration regarding HPL

COURSE DESCRIPTION



Noise pollution is excessive environmental noise that disrupts the activity or balance of human life. As the urban environments have become increasingly dense, the problem has magnified and has been shown to pose threats to mental and even physical health. Sound is everywhere, but it can be controlled with architectural solutions. To learn to control sound in buildings, this course provides a refresher on the basic science of acoustics and how sound interacts with our surroundings. From there, participants will explore various architectural solutions, the technology behind them, and how they are successfully integrated into buildings to reduce noise. Solutions offered cover retrofits and new construction options for sound control. The course uses music, sound, and visuals to engage participants.

Learning Objectives

- Overview of the science behind sound and acoustics
- 2. Why are Acoustics important?
- 3. What are the components of Specialty Acoustic Treatments?
- Mounting Methods for Acoustical Wall and Ceiling Treatments



Course Description

Architectural metal fabric is a dynamic exterior material that can be used to create beautiful and functional facades, balustrades, and screening for libraries, academic buildings, parking garages, stadiums, and other public and commercial buildings. This course will discuss exterior applications for metal fabric and its performance benefits including safety, security, solar management and sustainability. We will also explore coatings and graphics technologies that can be incorporated into metal fabrics to create a building and brand's visual identity.

Learning Objectives

- Examine how architectural metal fabrics for exterior applications provide solutions for outdoor design challenges.
- Learn the performance benefits of exterior metal fabrics including safety and security, solar management, and sustainability.
- 3. Explore how to create visual identity and branding with metal fabrics, including etching, lighting, color, and transparent media facades.
- 4. Identify ideal applications for the product and review case studies where the material was used.