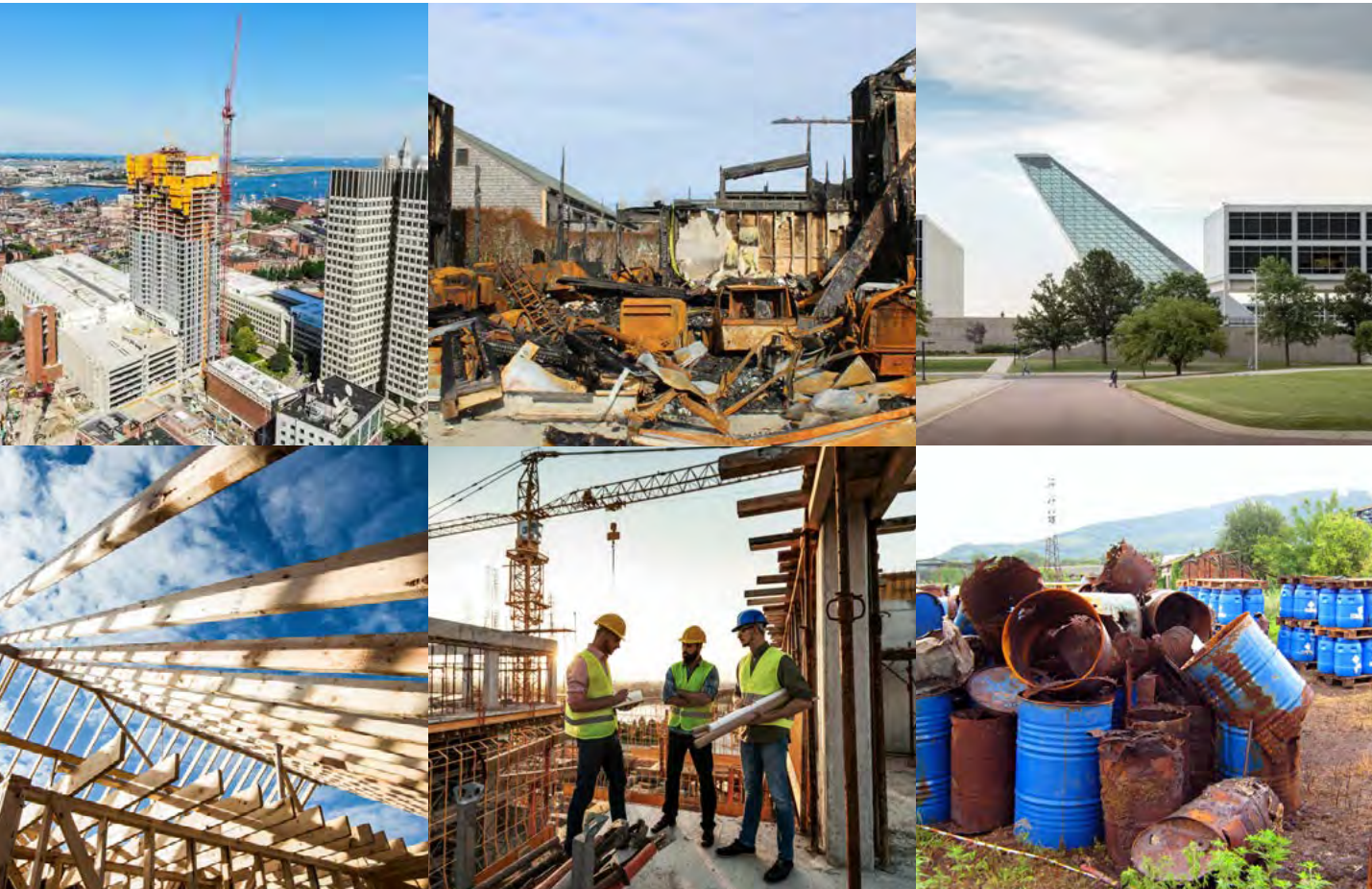


VERTEX®



Continuing Education Course Catalog

VERTEX embraces a Lifetime of Learning philosophy, and we are committed to combining academic and practical learning to achieve enriched curricula that adds value to our clients and employees.

Table of Contents

ENVIRONMENTAL 1

DUE DILIGENCE 1

Due Diligence for Development 1

INDUSTRIAL HYGIENE & BUILDING SCIENCES (IHBS) 1

Universal Waste 2-Hour Awareness Training 1

INSURANCE SERVICES 1

Background, Sources, and Evaluation of 1,4-Dioxane 1

Background, Sources, and Evaluation of Polyfluorinated and Perfluorinated Chemicals 1

Chemical Fire Claim Management 2

Conditions for Reopening Closed Remedial Sites 2

Environmental Insurance Concerns in Urban Redevelopment 2

Perchlorate: An Overview 2

Residential No. 2 Fuel Oil Systems 3

Underground Storage Tanks 3

EXPERT SERVICES 4

CONTRACT CLAIMS 4

Construction Delay Analysis Simplified 4

Schedule Analysis Methods 4

DAMAGES 4

Construction Contracts and Their Associated Risks 4

Differential Foundation Movement: Construction Means & Methods to Implement Repair 4

FORENSIC 5

Commercial Roofing: Parts 1 and 2 5

Concrete Deficiencies 5



Construction-Related Mold Claims	5
Decks and Balconies	5
Engineered Wood Construction	5
Fire Investigation Basics	6
Fireplace & Chimney Inspections	6
Infrared Investigations Introduction: Appropriateness and Limitations	6
Mid-Rise / High-Rise Construction: Typical Building Envelope Defects	6
Pre-Loss Versus Code Upgrade Repairs	6
Proper Evaluation of Water Leakage at Building Walls	7
Residential Roof Framing Workshop	7
Roof Mounted Solar Panels	7
Septic System Basics	7
Snow Loading and Ice Dam Considerations	7
Stucco and EIFS	8
The Path to SB 721 Compliance	8
Tile Flooring Debonding & Buckling	8
Vibration Damage Claims	8

REAL ESTATE & CONSTRUCTION SERVICES 9

Construction Defect and Delay Risk Mitigation	9
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SURETY 10

Calculating Productivity Loss and Delay on Disrupted Construction Projects	10
Construction 101	10
Construction Process Overview “Evaluating Specialty Contractors” Considerations for Claims/Underwriting	10
Contract Dispute Resolution for Federal Projects [Joint presentation with counsel, Watt Tieder]	10
Construction Contract Administration & Common Occurrences of Maladministration	11
Cost-to-Complete Analysis & Closing Out Projects	11

Current Trends: Technology in Construction & Claims 11

Failure by Design: Issues with Plans, Specifications, and Submittals. 11

Fundamentals of an Effective Cost-to-Complete Analysis 12

Fundamentals of Insurance Risk Products for the Construction Industry 12

Handicapping Affirmative Claims. 12

Key Considerations for Projects in Foreign & Remote Locations. 12

Main Considerations in Project Schedule Analysis 12

ENVIRONMENTAL

DUE DILIGENCE

Due Diligence for Development



This program was developed to communicate some of the most important principles and explains why this process is critical to the developer's proforma and risk evaluation when purchasing a property. We discuss historical research, Recognized Environmental Conditions (RECs), other commonly identified environmental issues, what happens if an environmental issue is identified, data collection techniques, and strategies to consider around complex development planning topics such as the appropriate amount of soil pre-characterization, asbestos and PCB assessment.

INDUSTRIAL HYGIENE & BUILDING SCIENCES (IHBS)

Universal Waste 2-Hour Awareness Training

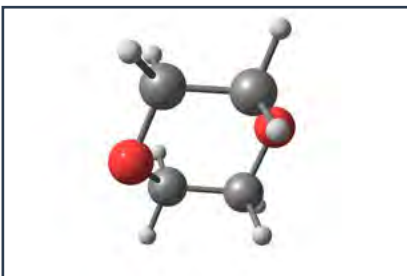


This program will provide you with the ability to identify the health and environmental hazards of universal wastes; properly label, handle, and store universal wastes; and respond to emergencies.

Universal Waste Training Requirement for Small Quantity Handlers: A small quantity handler of universal waste must inform all employees who handle or have responsibility for managing universal waste. The information must describe proper handling and emergency procedures appropriate to the type(s) of universal waste handled at the facility.

INSURANCE SERVICES

Background, Sources, and Evaluation of 1,4-Dioxane



The presentation will focus on 1,4-Dioxane background, regulatory history and environment, and exposure and health effects and how each of these categories can impact underwriting and claims. The presenters will discuss investigation and remediation case studies.

1

CE

CLE

Background, Sources, and Evaluation of Polyfluorinated and Perfluorinated Chemicals



The presentation will focus on PFAS background, regulatory history and environment, and exposure and health effects and how each of these categories can impact underwriting and claims. The presenters will discuss investigation and remediation case studies.

1

CE

CLE

Key

1

Time in Hours

CE

Credit Type



On Demand

Chemical Fire Claim Management



This presentation will provide an overview of chemical fire claims and the various steps to obtain and review information, identification of key issues, and an overview of several claim scenarios.

1 CE CLE

Conditions for Reopening Closed Remedial Sites



This presentation provides an overview of 5 different ways that claim sites may be reopened and the reasoning why to help provide an understanding to claim handlers and what to expect.

1 CE CLE

Construction Related Mold Claims



The presentation will provide an overview of various types of construction, potential for mold impacts, considerations for underwriters, and case studies which evaluate subrogation, allocation and improvement scenarios.

1 CE CLE

Environmental Insurance Concerns in Urban Redevelopment



The presentation will focus in on redevelopment sites that have an environmental component associated with the presence of a hazardous substance(s), pollutant(s), or contaminant(s). The presenters will discuss general site risks, the importance of due diligence, and several case studies.

1 CE CLE

Perchlorate: An Overview



The course will discuss various technical aspects of perchlorate, including how these relate to some of the issues commonly faced by claims analysts handling claims made on environmental/pollution insurance policies including the review of costs submitted with respect to reasonableness and necessity, and applicable exclusions; the potential for bodily injury claims; issues regarding the source and timing of pollution that may affect coverage; occurrence vs. claims made policies and new vs. pre-existing conditions coverage considerations; the setting of reserves; and the possible use of structured settlements to resolve perchlorate-related claims, as the associated cleanups are often costly and long-tailed.

1 CE CLE

Residential No. 2 Fuel Oil Systems



The purpose of this presentation is to provide an overview of the components of a residential heating system including aboveground and underground storage tanks. The presenters will discuss common causes of No. 2 Fuel Oil losses and the steps involved in Cause & Origin investigations.

1 CE CLE

Underground Storage Tanks



The presentation will provide an overview of an Underground Storage Tank (UST) system, common points of release, investigative techniques and remedial technology options.

1 CE CLE

EXPERT SERVICES

CONTRACT CLAIMS

Construction Delay Analysis Simplified



Construction delays can have far-reaching consequences. It may result in time and cost claims and has the potential to end in costly disputes if the claims are not accurately assessed. The transparent and accurate analysis of delay claims is an essential component of a successful risk mitigation strategy for construction projects. The goal of this webinar is to simplify the many complexities associated with delay analysis by: (1) reviewing the basic building blocks of delay analysis; (2) explaining the basic steps for successful analysis and (3) discussing typical challenges experienced.

1

CLE

Schedule Analysis Methods



The purpose of this program is to review the main considerations in project schedule analysis, which includes reviewing the key characteristics of construction delay claims and discussing the forensic schedule analysis methodologies commonly employed throughout the industry. The presenters explain the implementation of each of the discussed methods and identify scenarios under which each may be appropriate.

1

CLE

DAMAGES

Construction Contracts and Their Associated Risks

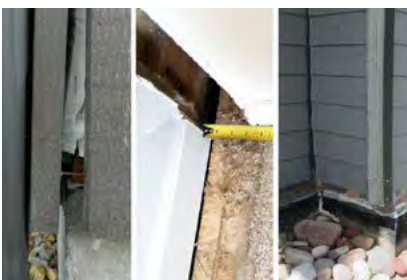


The purpose of this program is to review the construction contracting process and the risks associated with the various construction contract types. The presenters will review in detail the following topics associated with construction contracting: (1) the building process, (2) common project delivery methods, (3) construction contract sources, (4) contract types, and (5) risk associated with the various contract types.

1

CLE

Differential Foundation Movement: Construction Means & Methods to Implement Repair



Differential movement in both residential and commercial projects can cause extensive structural and cosmetic damage oftentimes requiring significant costs to repair the existing damage and to mitigate further differential movement. The visible damage and high cost of repair oftentimes result in litigation.

The purpose of this program is to review common terminology and repair methods involving foundation underpinning when differential movement exceeds allowable tolerances. The objectives of this presentation are to: (1) understand common terminology; (2) understand common foundation and finishes configurations and their impact on construction repair costs; and (3) strategic means and methods to

minimize cost while addressing structural concerns.

1

CLE

FORENSIC

Commercial Roofing: Parts 1 and 2



The purpose of this presentation is to introduce commercial roofing systems. The presentation will introduce the different types of roofing and will discuss proper codes and guidelines to be utilized when installing. The presenters will also discuss potential storm damage to the different types of roofing systems along with potential defects which are often mistaken for storm damage.

1 CE CLE

Concrete Deficiencies



The purpose of this course is to provide a general overview of the most common concrete deficiencies and their causes. The objectives of this presentation are to: (1) review concrete basics, (2) discuss common concrete surface defects and their causes, and (3) troubleshoot finishing and mix design issues. Code and industry standard references will be provided throughout the presentation to provide context and background behind common issues.

1 CE CLE

Construction-Related Mold Claims



claims management.

The purpose of this program is to review the complex nature of microbial claims management. The objectives of this presentation are to: (1) review how claim investigations should be conducted, including the basics of mold growth, health effects of mold exposure, cause and origin investigations, investigation techniques, pros and cons of air sampling, and legal requirements, and (2) review claims management, including review of remediation protocols, review of contractor estimates, and invoices/change order reviews. Additionally, the presenters discuss the benefit of expert involvement in mold remediation claims, as well as four case studies to provide real life examples of litigation cases stemming from microbial

1 CE CLE

Decks and Balconies



The purpose of this course is to provide a general overview of decks and balconies. Collapsed decks and balconies along with their guard rail components represent one of the leading causes of personal injuries resulting in property, liability, and negligence claims. The objectives of this presentation are to: (1) identify the key components of decks and balconies and their purpose, (2) review the applicable building code requirements, (3) highlight importance of guardrail detailing, and (4) discuss the role of property owners and deferred maintenance issues. Examples of common failures will be provided throughout the presentation to reinforce topics covered.

1 CE CLE

Engineered Wood Construction



The construction industry has seen a recent explosion in the use of wood-framed construction. The purpose of this presentation is to provide an overview of the different engineered wood components and highlight advantages and challenges of building more and higher with wood framing. Objectives during this presentation will include: (1) progression of wood construction, (2) conventional wood framing, (3) types of engineered wood products, (4) advantages and challenges of wood construction, and (5) future growth and code adoptions.

1 CE CLE

Key

1 Time in Hours CE Credit Type ▶ On Demand

Fire Investigation Basics



The purpose of this presentation is to explain Fire Investigations and Investigators as well as legally mandated and professionally required actions to insurance industry claims and adjusting personnel. The program highlights the Codes, Standards, Guidelines, Court Decisions and Case Law along with investigator training, education and experience that together guide the investigative process in the quest to determine the Origin and Cause of a fire. The presentation also includes discussion of investigative terms including evidence, spoliation, subrogation and the Scientific Method of the investigation.

1 CE CLE

Fireplace & Chimney Inspections



The purpose of this presentation is to: (1) discuss common types of fireplace and chimneys, including a discussion of fuel types, (2) provide an overview of the construction of common residential fireplace and chimney structures, (3) discuss common forms of fireplace and chimney losses, including fires, weather related damage, and foundation settlement, (4) discuss common inspection techniques, and (5) and finally discuss repair methods. The presentation includes many photographic examples and our goal is for a claims adjuster to leave the presentation with an increased level of comfort with the construction, operation, and inspection of chimneys and fireplaces.

1 CE CLE

Infrared Investigations Introduction: Appropriateness and Limitations



The purpose of this program is to introduce the technology and the concepts behind effective investigations employing IR equipment. The objectives of this presentation are to: (1) explain what IR is and what it is not, (2) when it is desirable to use the tool, (3) how it can be employed effectively, (4) what good results look like and how they can inform decisions, and (5) provide examples of successful studies using the technology.

1 CE CLE

Mid-Rise / High-Rise Construction: Typical Building Envelope Defects



The purpose of this course is to provide an overview of typical building envelope construction defects related to Mid-Rise and High-Rise buildings. The objective of the presentation is to discuss common building envelope assemblies associated with these building types and identify common deficiencies related to each.

1 CE CLE

Pre-Loss Versus Code Upgrade Repairs



The purpose of this presentation is to unpack the often-confusing determination of when repair to building damage can simply restore the components to pre-damage conditions versus when repair to building damage requires additional code upgrades. This presentation will present a simple flowchart ("cheat sheet") that covers the requirements for all 50 states and DC for repairs to both residential and commercial buildings.

1 CE CLE

Proper Evaluation of Water Leakage at Building Walls



The purpose of this course is to provide a general overview of water leakage sources through exterior building walls. The objectives of this presentation are to: (1) maximize non-invasive inspection procedures, (2) discuss industry standards for evaluating building wall leakage, and (3) implementing ASTM 2128.

1 CE CLE

Residential Roof Framing Workshop



One of the most common causes of property damage claims for residential properties is related to construction defects due to a general misunderstanding of the terminology, purpose, and detailing of roof framing. In our experience, even the most experienced contractor, engineer, or architect often do not fully understand the basics of residential roof framing. This workshop aims to provide an overview of: (1) roof framing basics, (2) components and terminology, (3) code requirements for roof framing, and (4) common construction defects and failure mechanisms. Real-world examples will be provided throughout presentation to illustrate topics and terminology covered.

1 CE CLE

Roof Mounted Solar Panels

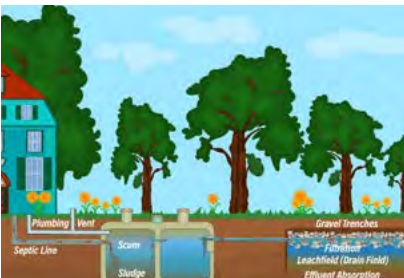


With the recent exponential growth in renewable energy technologies and installations, the rate of installation of roof-mounted solar panels is outpacing code adoptions and understanding of the structural requirements by the parties involved. This can lead to design errors, construction defects, contractor liability, or property damage that owners, insurance carriers, attorneys, and designers have to navigate. This presentation aims to outline the relevant structural building code requirements and provide some examples of common failures. The presentation will provide an overview of: (1) basics and components of roof-mounted solar panels, (2) codes and references, (3) common structural issues leading to failure, (4) building envelope

issues, and (5) troubleshooting design and liability claims.

1 CE CLE

Septic System Basics



The purpose of this presentation is to become familiar with the basic components of a subsurface sewage disposal system (septic system) and review some common modes of failure. The objectives of this presentation are to: (1) review the components of a typical septic system, (2) become familiar with information provided on a typical plan/drawing, and (3) review common modes of failure. The presenters will also discuss potential repair methods for some of the more common failures.

1 CE CLE

Snow Loading and Ice Dam Considerations



The purpose of this course is to provide a general overview of common roof construction issues that can lead to moisture intrusion and/or framing damage during ice dam or snow accumulation. The objectives of this presentation are to: (1) review flashing requirements for roof and siding, (2) discuss mechanism of ice dam formations, (3) highlight the role of attic insulation and ventilation, (4) discuss roof sheathing types and spacing requirements, and (5) provide overview of common failure mechanisms of structural framing during snow load event.

1 CE CLE

Stucco and EIFS



The purpose of this presentation is to introduce the participant to traditional stucco and EIFS. With much of the U.S. accepting and widely using stucco, especially in humid regions, the understanding of the system and its intention is critical. The presentation will introduce the different materials which are included within a traditional stucco system and the importance of each. The presenters will discuss proper codes and guidelines to be utilized when installing. The presentation will also review potential defects and installation issues which have caused historical problems. Lastly, we will provide inspection guidance and items to be concerned with when inspecting.

1 CE CLE

The Path to SB 721 Compliance



This program will provide you with an understanding the impact of California's exterior elevated element inspection laws on apartment owners, lenders and asset managers.

1 CE CLE

Tile Flooring Debonding & Buckling



The purpose of this course is to provide a general overview of tile flooring and the common failure modes of non-bonding and buckling. The objectives of this presentation are to: (1) review tile flooring types and installation, (2) identify tile flooring debonding and buckling, (3) study causes of tile flooring failure, (4) outline approaches on how to assess flooring for debonding and buckling, and (5) review various case studies.

1 CE CLE

Vibration Damage Claims



The purpose of this presentation is to introduce damage claims from construction and blast loading for property and liability claim professionals. The objectives of the program will be to: (1) provide basics of vibration due to construction and blasting activities, (2) research and thresholds for vibration damage, (3) evaluating damage claims, and (4) preventing and mitigating vibration damage claims.

1 CE CLE

REAL ESTATE & CONSTRUCTION SERVICES

Construction Defect and Delay Risk Mitigation



The purpose of this program is to help pension fund clients better understand why construction projects fail and provide attendees with tools to mitigate those risks from VERTEX's experience. The presentation will review construction risk factors, tools for prevention and detailed case studies.

1

AIA

SURETY

Calculating Productivity Loss and Delay on Disrupted Construction Projects



The purpose of this program is to review considerations in calculating productivity loss and delay impacts on disrupted construction projects with a focus on the presentation of damages. The objectives of the presentation are to: (1) introduce productivity and CPM scheduling basics relevant to time-related impacts; (2) discuss the claim evaluation process from the evaluator's perspective; (3) identify common impacts to construction projects; and (4) review key concepts relating to the presentation of damages. The presenters will also walkthrough examples to demonstrate how to apply the discussed principles.

1 CE CLE

Construction 101



The purpose of this presentation is to explain the building process through a discussion of the pre-construction, construction and post-construction phases. This program highlights the keys to a successful project during all three phases and will also include a detailed explanation and examples of conceptualization, design, construction documentation, construction, and closeout / evaluation.

1 CE CLE

Construction Process Overview "Evaluating Specialty Contractors" Considerations for Claims/Underwriting



The purpose of this presentation is to explain the building process through a discussion of the pre-construction, construction, and post-construction phases. This program highlights the keys to a successful project during all three phases and will also include a detailed explanation and examples of conceptualization, design, construction documentation, construction, and closeout / evaluation.

1 CE CLE

Contract Dispute Resolution for Federal Projects [Joint presentation with counsel, Watt Tieder]



The purpose of this program is to review contract dispute resolution on federal projects. The objectives of this presentation are to: (1) provide a background of the common types of claims and how the Federal Acquisition Regulations address these claims; (2) describe in detail the evolution of a claim; (3) outline the dispute resolution process; and (4) provide strategies for claim resolution. Additionally, the presenters will review several case studies and the outcome of each to provide real life examples of what surety providers and claim adjusters may encounter.

1 CE CLE

Construction Contract Administration & Common Occurrences of Maladministration



The purpose of this presentation is to review standard construction contract administration procedures, and also discuss common occurrences of maladministration. The presenters will discuss issues which commonly arise with the administration of a contract which may not be in compliance with contract procedures, thus potentially offering a surety and their counsel with defenses against a performance bond claim. Strategies to identify occurrences of maladministration will also be discussed.

1 CE CLE

Cost-to-Complete Analysis & Closing Out Projects



The purpose of this program is to review a cost-to-complete analysis and the project closeout process. The objectives of this presentation are to: (1) review the fundamentals of a cost to complete analysis and how this loss analysis report is prepared, (2) identify key closeout components, (3) discuss how to successfully track the closeout process and (4) discuss how to avoid potential closeout pitfalls.

1 CE CLE

Current Trends: Technology in Construction & Claims



The purpose of this program is to review current and recent technological developments in the construction industry and advise the audience how those technologies can be utilized in the Surety industry. The objectives of this presentation are to: (1) review technological developments and state-of-the-art equipment recently released in the construction industry; (2) discuss potential applications of the new technologies as they relate to the Surety bonding and claims industry; and (3) explain how the implementation of these methodologies can mitigate both risk and loss in a claim, and how they can aid with development of cost estimations and completion studies.

1 CE CLE

Failure by Design: Issues with Plans, Specifications, and Submittals



The purpose of this presentation is to review and discuss the impact of contract documents, such as Plans and Specifications, and other project documents, such as RFI's and Submittal's with respect to design responsibility and resulting liabilities. Common contract language is specifically highlighted to present potential pitfalls. The presentation will review: (1) understanding design responsibility in various project delivery methods; (2) how to deal with ambiguities in Plans and Specifications; (3) Contractor obligations with respect to the review of contract documents; (4) the role of submittals, shop drawings and RFI's; (5) Surety defenses under common scenarios involving issues with Plans, Specs and submittals; and (6) other considerations for a Completing Surety. With a thorough understanding of the key project documents, the presenters will provide both underwriters and claim handlers with a mindset approaching project risks and claims.

1 CE CLE

Fundamentals of an Effective Cost-to-Complete Analysis



The purpose of this program is to review the fundamentals of a Cost-to-Complete Analysis. The goals of this presentation are (1) to discuss the key components of a cost to complete analysis including but not limited to subcontractor and vendor balances, remaining buyout estimates, self-performance estimates, general conditions, accounts payable including earned retainages, and potential back charges and claims and (2) to discuss project risks and exposures and how to reflect same in the cost to complete analysis.

1 CE CLE

Fundamentals of Insurance Risk Products for the Construction Industry



The purpose of this program is to provide an overview of the most common types of underwritten risk products used in the construction industry today. The objectives of the presentation are to: 1) Discuss the fundamentals of underwritten risk products such as: Contractor Commercial General Liability (CGL); Contract Surety Bonds - Payment and Performance; Builders Risk Insurance; OCIP/CCIP Policies; Contractor Professional Liability (E&O) Insurance; & Subcontractor Default (SubGuard) Insurance; 2) and to discuss how these different products are triggered when a Construction Defect Claim arises.

1 CE CLE

Handicapping Affirmative Claims



The purpose of this course is to review how to evaluate and handicap affirmative claims that are presented to sureties by their principals. The surety professional needs to understand whether its Principal's claims against the Obligee may have merit and could result in recovery. This is a key consideration to determine the path forward for claim settlement, to determine how to include the principal's claim(s) in the surety's loss analysis. There are several variables to consider when handicapping an affirmative claim, such as compliance with notice provisions entitlement analysis, schedule impact analysis, and the damages quantification.

1 CE CLE

Key Considerations for Projects in Foreign & Remote Locations



The purpose of this presentation is to review the key considerations for projects in foreign and remote locations, specifically as applicable to U.S. contractors performing work in foreign or remote locations. The presenters will review in detail the following project topics where risks and associated cost increases are the greatest: (1) construction team management staff, (2) construction team labor force, (3) location regulations and laws, (4) communication challenges, (5) material, equipment, and systems procurement, (6) project specific & administrative requirements and (7) performance bond claims & surety takeovers. Additionally, the presenters will review a variety of case studies and the outcome of each to provide real life examples of what surety providers and claim adjusters may encounter.

1 CE CLE

Main Considerations in Project Schedule Analysis



The purpose of this program is to review the main considerations in project schedule analysis, which includes reviewing the key characteristics and common causes of delay claims, types of resultant delay damages, and forensic scheduling methodologies. The presenters will also discuss contractual considerations, example scheduling tools, the quality of schedules encountered, and supporting documentation requirements.

1 CE CLE