## TR1 (2020): Roofing Options

This course is a review of the many different roof system options available to the designer. It provides a basic examination of system strengths and weaknesses, life cycle expectations, energy conservation impacts and other sustainable considerations.

## TR3 (2020): Modified Bitumen Roofing

An introduction to modified bitumen roofing systems; Provides a basic examination of system strengths and weaknesses, life cycle expectations, energy conservation impacts and sustainable considerations.

## TR4 (2020): Single Ply Roofing

An introduction to single ply roofing systems; Provides a basic examination of system strengths and weaknesses, life cycle expectations, energy conservation impacts and sustainable considerations.

## TR8 (2020): Facility Asset Management

The Facility Asset Building Envelope Management presentation will help you eliminate small problems such as air & water leaks and minor imperfections before they become expensive issues that require major repair or replacement. By employing a proactive asset management program, you can significantly extend the service life of your roofing and building envelope, lower your total facility management costs, and reduce energy consumption.

## TRC002 (2020): Building Air Leakage and Effects on the Building Envelope

This presentation is for architects and other design professionals interested in increasing their knowledge of the application and use of air barriers in the building envelope of commercial and multi-family residential buildings. Researchers, architects, and code writers have shown that attention to specific details in both new and retrofitted envelopes result in better performing buildings with better comfort and long durability as well as lower energy consumption.

## **TRM002: The Importance of Quality Detailing**

A discussion of the complexities of flashing details as they pertain to different roofing systems. This presentation provides procedures on how to improve the quality of the roofing system details by being code compliant and making other upgrades to the specifications.

#### TRM016 (2020): Job Site Inspection

An introduction to Job Site Inspections. Participants will gain a working knowledge of the integral parts of effective inspections; understand the value of inspections and their relation to a quality roof system; and learn how to ensure the quality of a roof installation.

# AlA Accredited Seminars



The Roofing and Building Maintenance Division of the Tremco Construction Products Group offers AIA/CES seminars, which our field advisors can present to small groups of architects/ specifiers at association meetings or their offices. These seminars provide one HS&W Learning Unit (except as noted) and may provide additional credits, as indicated. To schedule a Tremco sponsored AIA/CES seminar, please call:

Tremco Roofing Marketing Phone: 800.852.6013



Tremco Incorporated is a passport provider of AIA/CES programs. Provider number: J157



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## TRM018 (2020): Built-Up Roof System Field Inspection

An on-site field inspection of a built-up roof system to visually identify the different configurations and proper installation of various BURs; understand the difference between NRCA recommended details and field fabricated details; and understand the complexities of meeting code requirements and good roofing practice.

## TRM019 (2020): Modified Bitumen Roof System Field Inspection

An on-site field inspection of a modified bitumen roof system to visually identify the different types of MB membranes; understand the difference between NRCA recommended details and field fabricated details; and understand the complexities of meeting code requirements and good roofing practice.

## TRM020 (2020): Single Ply Roof System Field Inspection

An on-site field inspection of a single ply roof system to visually identify the different types of single ply membranes, components and attachment methods; understand the difference between NRCA recommended details and field technical details; and understand the complexities of meeting code requirements and good roofing practice.

## TRM025 (2020): Case Study: Achieving LEED Gold with a Fully Integrated Building Envelope

A commercial office building renovation project case study; changing an inefficient structure into a model for energy/water conservation and consumption. This presentation explores the many systems that were designed to improve building efficiencies and make the work environment a better place for all employees. Also, it will explore the systems that contributed to the submission for LEED Gold status.

## TRM026 (2020): Maintaining Building Envelope Integrity

A review of water entry points in the building envelope; provides a basic review of often overlooked areas including coping joints, porous/deteriorated masonry walls, thru-wall construction, wall louvers, window & door openings and HVAC entry points.

## TRM028: Fluid Applied Roofing System

Fluid applied roofing systems are excellent choices for restoring degraded but still functioning roofs; they are also applicable for new construction. This course defines what "fluid applied" means. It also describes the different types, uses and benefits of fluid applied roofing systems, including their ease of application, their potential for improving a facility's sustainability, and their flexibility for use as a flashing system.

## TRM029: Roof Preservation: A Sustainable Option

This course is a discussion about extending the service life of an existing roof through restoration. We will explore the various options and materials available and identify which types of roofing systems are best candidates for roof restoration. This course also delves into the economics and environmental benefits of roof restoration.

#### **TRM031: Designing Safety Solutions**

This course is a review of rooftop safety, hazards, laws and codes. The aim is to develop and reinforce general awareness of the risks that can be alleviated with properly designed rooftop safety solutions.

#### **TRM032: Roof System Diagnostics**

This presentation will describe the harmful effects of wet insulation in a roof system and the best methods for detecting moisture in a roof. The different diagnostic tools will be covered as well as the correct method of use for the different types of roof systems. Additionally, all the criteria for providing a comprehensive diagnostic roof system evaluation will be reviewed.



## TRM033 (2020): Vegetated Roof System Assembly Design

This course is a discussion about the complexities of vegetated roofing systems. This presentation walks through the typical components of a functional green roof system and provides the procedures on how to improve the quality of vegetated roofing system designs by focusing on detailing and performance.

## TRM034 (2020): Assessing & Maintaining Roofing and Building Envelope

Commercial roofing systems and roofing details can be very complex and difficult to properly maintain. Regular inspections and preventative maintenance can make all the difference in keeping these expensive assets performing well, even beyond their warranty. We will review possible water infiltration points in the building envelope and provide a basic review of often overlooked areas including coping joints, porous/ deteriorated masonry walls, flashings, counterflashings, window and door openings, and HVAC penetrations. Attendees will learn how to perform basic roof inspections and understand the different types of diagnostic tools used to discern roof problems.

## TRM035 (2020): Roof Recycling and Landfill Diversion

Over 8 million tons of roofing tear-off waste is dumped in the US landfills each year. Most major metropolitan areas now have mandatory recycling of construction and demolition waste. Corporations are increasingly moving towards building designs that include recyclable, or zero –waste materials. This presentation will assist designers in navigating zero landfill and recycling projects for new construction and retrofit commercial roofing systems.

## TRM036 (2020): Evolution of Standing Seam Metal Roofing

This course covers the history of standing seam metal roofing. It also describes in detail the many types of standing seam metal roofs, when each is applicable, how to specify each and avoid the pitfalls of poor design.

## TRM037 (2020): How to Recover an Existing Sloped Roof Using a Structural Standing Seam Roof System

This course is a discussion about the many benefits of a recover solution of existing sloped roofs with structural standing seam roof. It covers the different types of roofs that can be recovered, how to design a system to avoid common pitfalls, and the economic benefits of a structural standing seam recovery roof.

## TRM038 (2020): Cooperative Purchasing Contracts

## Note: 1 Learning Unit only, no HS&W LU

The purpose of this seminar is to educate the Design Professional about Cooperative Procurement Contracts that education and other public agency clients utilize to purchase construction materials and/or services. These entities and their contracts are growing in number and satisfy bid law requirements in many states.

Includes: the different types of cooperative contracts the Design Professional may encounter, how this method of purchasing can be of benefit to the Design Professional's relationship with existing clients, and how to utilize these contracts for business development.

## TRM039 (2020): Roof Restoration Systems Field Inspection

This course is a field discussion about how various types of roofing systems are restored and preserved. The course will explain different types of roof system diagnostic testing, including review of a thermal imaging/nuclear scan report. Various types of roofing membranes and their applicable restoration solutions will be discussed, as well as how to detail common roofing conditions. Lastly, attendees will learn how quality control inspections are conducted and what to be aware of regarding long-term, full systems warranties.



## TRM040 (2020): Fluid Applied Roofing Systems Field Inspection

This course is a field discussion about how fluid applied roof membrane systems are installed. This course will review different configuration options for fluid applied roofs, including different overburden options. Fluid applied roof membrane technologies will also be discussed. The course will conclude with a comprehensive discussion of the advantages and disadvantages of fluid applied roof membrane systems

## TRM042 (2020): Codes and Approvals

The purpose of this seminar is to educate the Design Professional about how codes and approvals both govern and improve the quality and performance of a specified roof system. It reviews the International Building Code (IBC), International Energy Conservation Code (IECC), Energy Star Program, wind uplift considerations, Underwriters Laboratories (UL), and Factory Mutual (FM) requirements that pertain to the building envelope.

#### **TRM043: Rooftop Renaissance**

The purpose of this seminar is to educate the Design Professional about additional uses for commercial roofing systems. Every day, we count on roofs to provide a dry, leak-free environment, but what if roofs can do more? In today's rapidly evolving environment, could the roof be the unsung hero in helping building owners meet emerging regulatory demands, as well as be utilized for sustainable gains? Consider the millions and millions of square feet of roofing installed, maintained and repaired on an annual basis. This program discusses practical strategies to approach roofing needs with a "higher purpose".

## **TRM044: Assessing Building Connectivity Through Drone Technology**

The purpose of this seminar is to educate the Design Professional about the rapid advancement of drone technology and its impact on the Building Sciences. Drone technology provides Design Professionals with the ability to remotely sense building envelope connectivity allowing for greater long-term performance. This leading-edge technology carries advanced high-resolution and thermal cameras, providing vantage points unachievable through traditional methods. The result is new, easily acquired and robust facility data. This presentation covers the latest in drone technology, building science applications & case studies, safety, privacy and regulatory elements.

#### **TRM045: Vegetated Roof System Assembly Field Inspection**

This course is a field discussion and observation regarding the design and proper installation of vegetated roofing (green roof) systems. Attendees will be see the components used in a high-performance vegetated roof system and review typical installation details. Attendees will learn the pros and cons of various types of roofing and waterproofing membranes used underneath vegetated roofing systems and how to ensure the entire assembly lasts beyond the specified warranty. Vegetation, soil, and drainage options will also be addressed as well as preventative maintenance requirements.

#### **TRM046: Roof Warranties**

Roofing systems are one of the few commercial construction building assemblies offered with a long-term warranty. Design professionals and building owners must be aware of what is covered, and not covered, by a roof warranty as well as be familiar with the different types of warranties, terms and conditions, and any owner requirements. Attendees will be introduced to the Uniform Commercial Code (UCC) and an important bulletin from the National Roofing Contractors Association (NRCA). Methods for specifying high performance, long-lasting roof membrane and flashing systems will be explained. Risk mitigation with regards to roof design and installation will also be discussed.

#### TRM048: Green Roof Failures...What's To Blame?

This course is a discussion about the complexities of vegetated roofing systems. This presentation walks through the potential pitfalls in green roof design, construction and maintenance. It will focus on best management practices used for long term success.

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