# **TR1: 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.

# TR2: Cold Process Roofing\*

An introduction to cold asphalt technology and cold process roofing systems: offers a basic description of the process and how it differs compared to hot asphalt systems.

## TR3: Modified Bitumen Roofing\*

An introduction to modified bitumen roof systems. Discusses the different materials used in manufacturing the components and how it relates to their performance characteristics of the system.

# TR4: Single Ply Roofing\*

An introduction to the different types of single ply membranes used in low slope roofing. Identifies the different materials available on the market and discusses the performance characteristics of each.

### TR7: Metal Roof Systems\*

An introduction to metal roofing systems; offering a basic description of the materials used and the performance characteristics of each.

# TR8: Facility Asset Management\*

The Facility Asset Management presentation will help you eliminate small problems such as 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 and lower your total facility asset costs.

# TRC002: 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 envelopes 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.

\*Provides one HS&W Learning Unit

# AlA Accredited Seminars



The Roofing and Building Maintenance Division of Tremco Incorporated 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 or 1.25 HS&W Learning Units 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



## TRM003: Codes and Approvals\*

Discuss how codes and approvals can improve the quality and performance of a specified roof system. Reviews the International Green Construction Code (IgCC), Energy Star program, Underwriters Laboratories (UL) and Factory Mutual (FM) requirements that pertain to the building envelope.

#### TRM011: Roof Warranties\*

Discusses what is covered or not covered in a roof warranty. Provides methods on how to specify a roof with long-term reliability.

### TRM015: Vegetated Garden Roof Systems\*

An introduction to Vegetated Roofing Systems. Participants will gain an understanding of the benefits of Vegetated Roof Systems; be knowledgeable in the difference between intensive and extensive systems; and understand the purpose of the system components under the growing medium.

# TRM016: 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.

### TRM017: The Real Cost of Quality\*

An analysis of the choices made during the specification development of quality roofing systems and their components.

#### TRM018: 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: 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: 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 fabricated details; and understand the complexities of meeting code requirements and good roofing practice.

#### TRM021: Metal Roof System Field Inspection\*

An on-site field inspection to visually identify the different types of metal roof systems; understand the complexity of metal flashing details and how local codes affect design practices in metal roof projects.

#### TRM022: Green Roofing: Achieving Sustainable Results\*\*

Discusses the roofing approach known as vegetative roofing. Explores the benefits, costs and limitations of this sustainable roofing technology as it applies to the end user, the designer and society at large.



<sup>\*</sup>Provides one HS&W Learning Unit

<sup>\*\*</sup>Provides 1.25 HS&W Learning Unit

# TRM023: Vegetated Roof System Field Inspection\*

An on-site field inspection of a vegetated roof system to identify the different configurations and proper installation of various components and configurations of vegetated roof systems; gain an understanding of the ecological and economic benefits of vegetated roofing system; develop insight regarding the maintenance differences between the various vegetated roof systems; review common design issues and learning lessons from previous industry projects.

# TRM024: Achieving Energy Efficient Roofing with Building Integrated Photovoltaics, Green Roofs and ENERGY STAR Design\*\*

This course will review how to achieve an energy efficient roof design using Photovoltaics (solar), Vegetative (Green) Roofing and/or ENERGY STAR design roof systems. We will explore the benefits, costs and limitations of these sustainable roofing technologies as they apply to the end user, the designer and the society at large. A review of the various approaches will be presented, including amorphous (thin film) and crystalline (panel) solar options, extensive and intensive vegetative roof systems and various ENERGY STAR roof selections. The various system components of each technology will be explored with appropriate applications for each selection identified. The overall intent of the course is designed to give the participant a good functional understanding of these cutting edge technologies and how best to employ their use.

# TRM025: 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: 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\* (Note: also provides one GBCl credit)

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.

# TRM030: Green Roofs Are Here To Stay: Why, How and the EPA\*

As part of the effort to regulate water safety, the EPA has recently endorsed Green Infrastructure practices as highly efficient ways to control the volume and quality of stormwater entering our sewer systems and natural waterways. This program will demonstrate why the EPA has defined vegetative green roofs as highly valued stormwater management solutions and now to optimize their performance.



<sup>\*</sup>Provides one HS&W Learning Unit

<sup>\*\*</sup>Provides 1.25 HS&W Learning Unit

### 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: Vegetated Roof System Assembly Design\*

(Note: also provides one GBCI credit and one LEED credit)

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: 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.



<sup>\*</sup>Provides one HS&W Learning Unit