

#### **AIA PROGRAM SUMMARIES**

# THE BASICS OF EXTERNAL CURING OF CONCRETE PROGRAM NUMBER 0BEC101

This course serves as an introduction to basic concrete chemistry and the chemical process of curing. Specifically, this presentation focuses on external curing methods, which are applied to the concrete following the pour. These curing methods maintain the optimal moisture content during various climactic conditions necessary for freshly placed concrete to reach its optimal strength and durability. Proper moisture management during the curing process can affect the performance of concrete significantly. There are many products and systems available to control moisture during this process and to prevent surface evaporation. This presentation provides an overview of the many curing options and the proper application for each. In addition, this course will touch on design and best application practices that allow these products and systems to work as intended. This program is registered with the AIA/CES for continuing professional education and is HSW-approved. The course earns one learning unit (LU).

# BASICS OF MOISTURE MOVEMENT THROUGH THE BUILDING ENCLOSURE PROGRAM NUMBER BE0700

This course serves as a comprehensive introduction into the world of building envelope moisture migration. Whether in liquid form, carried by air, or driven by vapor pressure, moisture poses a threat to our structures. This presentation describes how moisture enters the building enclosure above- and below-grade, how moisture can affect the structure and its occupants, and what products and systems can be used to keep moisture out. This presentation also touches on design and installation best practices that allow these products and systems to work as intended. This program is registered with the AIA/CES for continuing professional education and is HSW-approved. The course earns one learning unit (LU).

## BLINDSIDE WATERPROOFING: HOW TO SELECT AND SPECIFY PRE-APPLIED WATERPROOFING SYSTEMS PROGRAM NUMBER 0BW101-01

Blindside waterproofing is an approach to provide positive-side, below-grade waterproofing on construction sites where traditional waterproofing installations are not possible. Blindside waterproofing is a solution for zero lot lines and sites with limited access. In a number of situations, blindside waterproofing is being used where the foundation is below the water table or under a great deal of hydrostatic pressure. This course will explain why waterproofing a structure is essential to long-term durability, and the role that blindside waterproofing systems provide in these situations. In addition, it will discuss options for pre-applied waterproofing materials and standard installation techniques to ensure the effective, long-term protection of a structure in blindside waterproofing applications. Best practices in blindside application will also be discussed, along with case studies highlighting blindside applications on commercial projects. This program is registered with the AIA/CES for continuing professional education and is HSW-approved. The course earns one learning unit (LU).

## CONSTRUCTION JOINT SEALANTS: A CRITICAL PART OF BUILDING ENVELOPE PERFORMANCE PROGRAM NUMBER 7901-01

This course provides an overview of joint sealants and their critical role in construction. Discussion points include joint design, critical success factors, material selection, and more. Course users will learn and understand why joint sealants are needed for accommodating movement, functioning as a part of an air barrier and vapor retarding system, and necessary for acoustic control. This program is registered with the AIA/CES for continuing professional education and is HSW-approved. The course earns one learning unit (LU).

# DETAILING AIR BARRIERS PROGRAM NUMBER 7205-02

The one (1) hour course is an overview of the specific techniques for installing the different types of air barrier materials. Air barriers are required by code in most states. And while most architects understand the whys, they are not clear on the installation details. This important layer of the building envelope requires careful detailing and installation. Some firms are even requiring meetings with installation contractors to be sure details are correctly executed. This course covers tricky details, including rough openings, roof-to-walls, and joints between different building materials. This program is registered with the AIA/CES for continuing professional education, and is HSW-approved. The course earns one learning unit (LU).

## DETAILING FLUID-APPLIED WATERPROOFING #DFAW101 PROGRAM NUMBER DFAW101

This one (1) hour course begins with the history, definitions, and materials specifications of fluid-applied waterproofing. One of the most important points made in the program is how most of the manufacturers' standard details follow those in the National Roof Contractors Association (NRCA) Roofing and Waterproofing Manual. Not surprisingly, everything begins with a properly installed foundation. Improperly consolidated concrete and failing to allow enough space for waterproofing installation are among the problems facing installers. Course attendees are encouraged to think ahead—what will the waterproofing system tie into? Ensuring a fully-adhered and compatible connection with peripheral materials, expansion joint detailing, and MEP penetrations are among the key tie-in conditions and are the core messages of this program. This program is registered with the AIA/CES for continuing professional education, and is HSW-approved. The course earns one learning unit (LU).

### EFFECTIVE WATERPROOFING PROGRAM NUMBER 0SW101-02

This course explains some of the issues relating to concrete deterioration as a result of water penetration. The course also describes the different methods of dampproofing, waterproofing, and vaporproofing and differentiate between positive- and negative-side waterproofing. The course also identifies the various types of waterproofing systems and differentiates between them. This program is registered with the AIA/CES for continuing professional education, and is HSW-approved. The course earns one learning unit (LU).

# INTRODUCTION TO AIR BARRIER SYSTEMS PROGRAM NUMBER 7209

Air leakage both in and out of a structure increases energy costs and causes 70% - 90% of moisture movement through the building envelope. This moisture intrusion can cause serious problems, such as metal component corrosion, mold, and poor indoor air quality. This presentation discusses moisture movement, the negative impact on the building envelope, and how the air barrier relates to the other control layers (water, vapor, and thermal) to promote overall building sustainability. This program is registered with the AIA/CES for continuing professional education, and is HSW-approved. The course earns one learning unit (LU).

# PERMEABLE VS. NON-PERMEABLE AIR BARRIERS - WHICH DECISION IS BEST? PROGRAM NUMBER 7211

Information presented will assist designers in determining whether to use permeable or non-water-vapor-permeable air barriers. Attendees will gain knowledge of correct terminology, definitions, and specification language per CSI MasterFormat, International Building Code ("Code"), and other sources. One key discussion item is avoidance of the "double vapor barrier" condition. Attendees will learn the importance of designing exterior walls with optimum drying potential. Reference to technical articles by noted building science professionals and organizations are identified as important tools in the quest for using permeable or non-permeable air barriers. This program is registered with the AIA/CES for continuing professional education and is HSW-approved. The course earns one learning unit (LU).

# POLISHED CONCRETE FLOORS PROGRAM NUMBER 003300-02

This PowerPoint presentation on concrete polishing from W. R. MEADOWS provides the most current information on polished concrete, including the processes involved and the features and benefits of this type of flooring. W. R. MEADOWS has created this presentation to provide insight on why polished concrete is one of the fastest growing areas in the flooring industry, and also to provide exact detail, in a step-by-step format, of the concrete polishing process. In general, this presentation provides complete information on the science of polished concrete and the steps involved to properly install this type of floor. This program is registered with the AIA/CES for continuing professional education, and is also HSW-approved. The course earns one AIA credit.

## SELECTING THE CORRECT UNDERSLAB MEMBRANE PROGRAM NUMBER 071199-02

The first line of defense for protection of a building and its occupants starts below the concrete floor slab. Recently, not only has the concern been water and water vapor, but also other soil contaminants. Radon and methane, two naturally occurring contaminants, have been identified as being major issues for occupant health and safety. The continued construction in densely populated areas have dictated that brownfield sites are developed, bringing into play other types of contaminants in the form of hydrocarbons. This presentation will address the origin of these various contaminants and their effects, along with differentiating between an underslab moisture barrier and an underslab gas barrier. In addition, specific materials and their installation details will be discussed providing complete underslab protection. This program is registered with the AIA/CES for continuing professional education and is HSW-approved. The course earns one learning unit (LU).

## TREATMENTS TO IMPROVE CONCRETE PERFORMANCE PRESENTATION PROGRAM NUMBER CC3300-02

The intent of this presentation from W. R. MEADOWS is to provide the most current information available to explain the basics of cement hydration, and to introduce the various types of floor treatments and curing compounds available. The goal of this presentation is to help the specifying agency and end-user identify the correct material for the project. This program is registered with the AIA/CES for continuing professional education. The course earns one AIA credit.

## UNDERSLAB VAPOR RETARDERS AND BARRIERS PRESENTATION PROGRAM NUMBER 071198-01

This PowerPoint presentation on underslab vapor barriers and moisture migration from W. R. MEADOWS provides the most current information on building envelope moisture migration. Ground-borne moisture is the leading cause of flooring failures today. W. R. MEADOWS has created this presentation to inform the viewer of ways to combat this problem. In the presentation, several points are discussed, including different types of moisture movement, proper vapor protection design, and ASTM specifications. In general, this presentation provides information on the science of proper underslab waterproofing and vapor proofing. This program is registered with the AIA/CES for continuing professional education, and is also HSW-approved. The course earns 1 AIA credit.

Last Update: 01/09/24