Sponsor: Franklin International

AIA Credit Designation: 1 LU|HSW

Course Title:

Subfloor Construction Adhesives: Solvent Based, Water Based, and Reactives; Why Weather, Substrates and VOC restrictions can cause a Reference Standard Alone to Miss the Mark

Course Description:

This course will look at the differences between construction adhesives based on their core chemical makeup. It will compare and contrast VOC regulations and restrictions for indoor air versus those for outdoor air. It will compare the most commonly referenced subfloor adhesive performance specifications, identify their similarities and differences, and point out how lab conditions can differ from “real world” field conditions. The course will finally look at podium construction and the challenges created for adhesives due to fire rated wood framing systems in combination with VOC restrictions.

Learning Objectives:

1) Identify the primary construction adhesive base chemistry types and compare their advantages and limitations in regards to; a) compatibility with various substrate materials and; b) changes in temperature and other atmospheric conditions during application and in the subsequent bonding timeframe.
2) Identify the challenges for specifying adhesives posed by regulatory VOC restrictions and LEED v4 design restrictions. We want to distinguish between the most commonly referenced VOC restrictions for outdoor air quality versus those for indoor air quality as they relate to the use of subfloor adhesives.
3) Understand the history and performance requirements of the two primary subfloor adhesive performance specifications, APA AFG-01 and ASTM D3498. Explain the challenges for adhesives resulting from differences between lab conditions allowed by the subfloor adhesive performance specifications and the real world atmospheric conditions they were designed to meet or overcome.
4) Identify the challenges for specifying VOC restricted adhesives posed by fire rated wood framing systems and the use of fire-retardant-treated (FRT) wood components required in portions of IBC Type III construction often used with “podium” construction.