

Rainscreen backup wall design considerations and lessons learned for better coordination between trades

1 hour 1.0 AIA-HSW

When designing a rainscreen wall system, the backup wall design is one of the most important to properly detail, coordinate with all trades, taking into consideration the construction and installation tolerances, and the installation requirements for the backup wall, water and air resistive barrier, insulation detailing, and the rainscreen support system. Each component must be understood ahead of time, so the systems are properly detailed and specified before construction of the backup wall begins. Understanding connections that need to happen based on materials, tested systems, and compatibility of materials will make the quest to create the best possible building a reality. Proactively designing the necessary advanced detailing needed to the backup wall system, understanding construction requirements for each component, and lessons learned are discussed and dissected to improve future detailing and specifications. Knowing what to include in the Construction Documents and paying attention to the little details, will increase the likelihood of a successful project.

Learning Objectives:

1. Discuss and dissect early structural design considerations to accept the air, vapor, water, and insulation control systems, as well as the rainscreen façade support system to ensure adequate bid document detailing.
2. Develop an understanding of construction tolerances for systems and components to properly detail the structural rainscreen backup wall for different types of installations.
3. Review different types of rainscreen wall systems and their typical associated support systems which are delegated designed to coordinate with the Contract Documents.
4. Apply different lessons learned about continuity, structural fastening detailing, wall membrane requirements, limitations of systems, and what is needed for drawing and specification coordination and how to transfer them to Construction Documents for implementation.