EEBA
Energy & Environmental Building Alliance

Retrofits That Work: Building Science Lessons for Near Zero Renovations

In this full day session, learn **how renovating homes to near zero energy** can benefit from using building science-based design priorities through:

- selecting building materials and enclosure options
- considering new mechanical systems
- assessing the impact of renewables like PV or storage

This design workshop will cover the fundamentals of building science and how it is applied to assess durable and efficient enclosure **upgrades and renovations**. This session will also explore efficient, reliable and resilient HVAC selection procedures and equipment selection and testing.

The fundamentals of building science - air, heat, and moisture flow – OR house-as-a-system – will be outlined and applied to help participants make better choices with respect to construction materials and methods. Participants will also learn important information about indoor air quality and cost-effective strategies to be able to offer healthier indoor environments.

Attendees will gain a thorough understanding of **how to approach deep energy or near zero renovations, while ensuring the outcome of a durable, safe, efficient and comfortable residence**.

Learning Highlights:

- Learn the elements of high-performance renovations and how to apply building science to the decision matrix.
- Apply the building science to renovating attics, walls, windows, foundations, and HVAC decisions to create high performance EXISTING, near-zero homes.
- Assess the impact of adding renewables and/or battery storage.
- Identify the building process changes needed to cost-effectively implement high performance renovations.