

Implementing Effective Materials Research for Healthier Buildings

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ABSTRACT

We know the materials in our buildings have a real impact on human health. But how do we find out what is in those materials? And how can we use materials research during the design process to encourage transparency within the materials industry and help transform how building materials are made? A veteran materials researcher, an architect and an interior designer will share their experiences in the context of one of the strictest, most transparent measurements of healthy materials, the Living Building Challenge (LBC). Lessons will be drawn from several Living Building projects, including an ongoing design for a Living Building at Binghamton University, Nuthatch Hollow. We'll provide an overview of how the LBC works to advocate for healthy building materials. We'll lay out a methodology to develop a materials ethic for a design project and strategies for identifying an initial material palette, incorporating audience participation. We'll discuss the LBC imperative for specifying health materials relative to indoor air quality and the significant deficiencies in policies that regulate the chemicals in the products we use. We will explore how the essence of project place can be extracted to help inform the material palette selection, and strengthen the relationship between those healthy materials and LBC design imperatives. Finally, we'll outline how to "vet" a product: an overview of product types, documentation associated with these, and how we answer the question of "is it good enough".

BIOGRAPHIES

Matthew Broderick, AIA, NCARB, LEED AP BD+C is a Principal at Ashley McGraw Architects. In his 22 years at the firm Matt has worked on many sustainable, aspiration projects, including multiple LEED Gold buildings and currently a Living Building.

Lisa Carey Moore, LEED AP, BD+C, is a Healthy Materials Specialist at Integrated Eco Strategy, LLC. Lisa has engaged manufacturers to obtain documentation for three Living Building Challenge Projects that are pursuing full "Living" designation, and has worked with numerous stakeholders to help them understand how to navigate the materials research process.

Susanne Angarano, NCIDQ has extensive experience designing sustainable interiors with a focus on College & University and K-12 design and a passion for materials research.