Health AND High Performance: Putting Public Health Research on the Built Environment into Action

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ABSTRACT

What factors contribute to optimizing human health both indoors and outdoors within the built environment? Creating equitable and healthy communities is a product of multi-level interventions in policy, places, and people. This panel discussion will open with researchers from the Mt. Sinai and Healthy Buildings Network sharing recent evidence of health status improvements at both building and neighborhood-level project levels. Their current studies focus on the drivers of residential indoor air pollution and toxic materials in urban communities at residential and workplace projects will highlight opportunities for health equity in the urban built environment. It is now possible to evaluate insulation and sealant materials from a health standpoint and provide practical recommendations for moving up the ladder of healthier materials. This can help avoid adverse health impacts from chemical emissions from some of the chemicals commonly used insulation and sealants including persistent, bioaccumulative, or toxic chemicals, asthmagens, reproductive or developmental toxicants, endocrine disruptors, or carcinogens. Passive House and LEED/WELL/EGC experts from Steven Winter Associates, Inc., will then take this research into the project design and building sector by making the business case for broadening the definition of high performance buildings to include human health. Merging their “boots on the ground” experience in the built environment with expertise in green building certification programs, they will present some key strategies for protecting and promoting health in a socially equitable and cost-effective manner.

We've all known the benefits of improving health in buildings for quite some time now. In recent years, we have also started to connect the dots between energy upgrades and health improvements via better ventilation, quieter HVAC systems, etc. But we've yet to see the specific health benefits (and challenges) that are associated with electrification. How can we

improve our carbon footprint and hit the 2050 goals of climate change while simultaneously making our tenants happier and healthier? After all, who are we saving the planet for other than the HUMANS that live on it? As we move towards electrification, our health should be a top priority.

BIOGRAPHY

Lauren Hildebrand is a Sustainability Director at SWA. Her work focuses on sustainable and high performance residential and commercial building design, construction, renovation, and operation. Ms. Hildebrand's expertise includes: sustainable design integration; indoor air quality and energy performance testing; and implementing project certification for both commercial and residential programs, such as LEED®, ENERGY STAR®, NYSERDA, NJ Clean Energy, and Enterprise Green Communities. Awards presented to her clients include the 2013 USGBC NJ Urban Green Project Award.

Ms. Hildebrand works as a LEED® for Homes Green Rater and verifies implementation of the LEED® for Homes criteria. She is an integral part of the initial strategic planning sessions and workshops with builders, architects, and homeowners based on the LEED for Homes program. She also partners with and implements criteria for Enterprise Green Communities (EGCC), NYSERDA's Multi-Family Performance Program, and the ENERGY STAR® Multi-Family High-Rise Program Certification. Ms. Hildebrand also has experience with a variety of commercial and mixed use projects, including LEED® for New Construction, Commercial Interior, Core and Shell, and Schools.

In addition to her project experience and program guidance, Ms. Hildebrand manages classroom training and curriculum development for architects, owners, developers and building management staff on green and high performance building design strategies, cost effective building system operation, and energy-saving maintenance practices.