

A proposal for mass timber residence halls in the Northeast using regionally appropriate materials and methods

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ABSTRACT

There are many challenges in developing a new construction approach, including material cycles and environmental impact, education to understand the technology, and recognition of the potential impacts on the building occupant.

In this project, an integrated team collaborated to study a material flow from forest to finish to make regional mass timber use competitive with alternative approaches for student housing. The project began with a future casting to understand residence hall space configuration trends and generational preferences. Next, an architect and engineer worked to understand how mass timber could meet the structural and spatial requirements to integrate this biophilic design component into student housing. Working alongside the others, a researcher explored product development with local species and supply chain to ensure that the material sourcing supported forest and community health. This team presentation will share the current findings and avenues for further exploration of this approach.

BIOGRAPHY

Persis C. Rickes, Ph.D. has 35 years of experience in higher education planning. In 1991, she founded Rickes Associates, which focuses on college and university master planning, space optimization, instructional space utilization, space programming, and strategic program alignment. Planning is not just about ensuring that there is enough space, but about having the right kind of space to achieve strategic goals. Dr. Rickes is a long-time member of the Society for College and University Planning and has held a number of regional and national posts in the Association. Dr. Rickes has also written and spoken on generational students and how they are influencing higher education space needs. She holds a Ph.D. in Higher Education Administration, University of Connecticut.

Jodi Smits-Anderson is the Director of Sustainability Programs at DASNY, a lifetime member of NESEA, past regional and national U.S. Green Building Council committee member, wife, mom, hiker, kayaker, knitter, and storyteller. She is the 2018 recipient of the NYSGBC Green Building Advocate award.

Jim D'Aloisio is a Principal at Klepper, Hahn & Hyatt. He's a member of ACI, ASCE, AISC, CSI, NSPE, and NYSSPE. He has been a practicing structural engineer and building science professional for about 35 years. Hobbies include writing and hypermiling.