

Zero Energy Off the Shelf - Revisited

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ABSTRACT

Net-Positive-Energy building is a major tool to reduce the carbon footprint of our built environment as well as creating healthy and productive, indoor environments that are economical and profitable. Opening in May 2014, 231 Main is a LEED-Platinum (2015), LEED-Platinum 0+M (2019), LEED-Zero-Energy, LEED-Zero-Water (2020), Net-Positive-Energy, multi-tenant, office building located in the Hudson Valley. Serving as an example of a highly productive and healthful work environment, 231 Main is a resilient, trouble-free example of how to create, and operate, zero- energy buildings in cold Climates.

Using 231 Main as the starting point, the presenters will illustrate the key elements of creating zero-energy buildings including design principles, modeling, construction methods, commissioning, and post-occupancy verification.

With 8 years of energy data, and one full year of granular data using E Gauge monitoring tools, the presenters will revisit how a comprehensive approach is needed to achieve the goal of zero-energy building.

The presentation will include a recently completed embodied carbon analysis of the building structure and insulation systems. The analysis will illustrate, and compare, the built structure to an all mass-timber structure if built today.

Participants will walk away with tools for creating net-zero-energy healthy buildings.

BIOGRAPHY

Rick Alfandre, AIA, LEED AP BD+C over the past 30 years has designed and built hundreds of projects. Recently completed projects include government buildings, churches and synagogues, spaces, multiple dwellings, restaurants, hotels, manufacturing facilities and custom residences. The founder and President of Alfandre

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Architecture, he is expert in the design of healthy and productive places to live and work. Alfandre Architecture's offices are in their LEED Platinum (2015 and 2019), and Net Positive Energy, office building on Main Street, New Paltz, NY in the heart of the beautiful Hudson Valley.

Mr. Alfandre manages a youthful and motivated work force with a diversity of skills, training and interests. A leader in the green building movement in upstate New York, Mr. Alfandre has worked closely with the US Green Building Council (USGBC) to grow the USGBC New York Upstate region. Alfandre has spoken extensively on green buildings and sustainability. Alfandre is devoted to creating spaces and places of lasting beauty, working closely with clients to plan for efficient, resilient and cost-efficient projects.

He launched EcoBuilders Inc. in 2009 to provide full design and build services to his clients. Alfandre is a past Chair of the US Green Building Council NY Upstate Chapter, is a past member of the SUNY New Paltz School of Business Advisory Council and is a 2013 Business School Hall of Fame Inductee.

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