

PHIL KAPLAN AIA, LEED-AP PRINCIPAL



Phil Kaplan received his B.Arch from Carnegie Mellon University in Pittsburgh in 1991. He is a Registered Architect (NCARB), a member of the AIA (The American Institute of Architects) and a LEED (Leadership in Energy and Environmental Design) Accredited Professional. He is also a founder and Co-Chair of the PSA (Portland Society of Architects), a community design advocacy group in Portland, Maine. He has practiced all phases of architecture and design while working at firms in Portland, Maine and Boulder, Colorado.

Mr. Kaplan has been project architect on custom residential projects as well as commercial, retail and institutional projects. He has acted as General Contractor for two of his projects, in Maine and Colorado. His work has received numerous awards: in 2009 the US Green Building Councils LEED for Homes Innovative Project Award, in 2004 an Excellence in Design Award in an international competition and in 2002 a Maine AIA Award of Excellence. His projects have been published in books and magazines, and shown on national television.

Mr. Kaplan has served as exhibition juror and guest critic, and is currently serving as Adjunct Professor of Architecture at the University of Maine at Augusta. He has served on the board of directors of the Holocaust and Human Rights Center in Augusta, Maine. He has also served as Co-curator of a traveling exhibition for the internationally recognized Center For Furniture Craftsmanship in Rockport, Maine called Getting Personal: Maine Architects Design Furniture.

As a LEED Accredited Professional, he is committed to sustainable, “green” design in his practice, including strategies that promote energy efficiency and high-level building performance. He believes in staying on the cutting edge of the latest computer technologies, and enjoys personally crafting 3-Dimensional renderings and movies to help clients envision their future spaces.

RELEVANT PROJECTS AND REFERENCES

Project: BrightBuilt Barn Prototype (certified LEED Platinum)
Location: Rockport, ME
Super green prefabricated net zero prototype
Reference: Dr. Keith Collins, Client, (207)593-6392, keithcollinsmd@yahoo.com
Collaborators: Bensonwood, Petersen Engineering

Project: Greensward Hamlet (Designed for LEED certification)
Location: Buxton, ME
20 unit co-housing community with community center
Reference: Françoise Paradise, Client, 207-227-3678, feparadis48@yahoo.com
Collaborators: Oak Engineers

Project: Net Zero Deep Energy Retrofit (Designed for LEED Platinum)
Location: Falmouth, ME
Net-zero “deep-energy” refurbishment & alterations of an existing residence
Reference: Claudia King, (207)7813217

Project: Falmouth Workforce Housing (Competition winner)
Location: Falmouth, Maine
50 unit workforce housing
Reference: Richard Berman, Partner (207)772-3225, rberm@midmaine.com

JESSE THOMPSON AIA, LEED-AP PRINCIPAL



Jesse Thompson received his B.Arch from the University of Oregon in 1996. He is a Registered Architect (NCARB), a member of the AIA (The American Institute of Architects) and a LEED (Leadership in Energy and Environmental Design) Accredited Professional. He is also Co-Chair of the PSA (Portland Society of Architects) Advocacy Committee, a community design advocacy group in Portland, Maine that is dedicated to reforming our land use regulations that stand in the way of a better designed environment. Recently he has served as co-designer for Habitat for Humanity Portland's first LEED certified low-energy home. He has practiced all phases of architecture and design while working at firms in Maine, Massachusetts and Vermont. Jesse grew up in the Northeast Kingdom of Vermont, and lives in the Deering neighborhood of Portland with his family.

Jesse's portfolio straddles the residential and commercial worlds, and has a deep knowledge of modern construction types and project planning. These projects have included designing intimate residential additions to managing a \$40,000,000 mid-rise luxury condominium project.

Jesse is Kaplan Thompson's director of technical and digital practices, maintaining our leadership in energy efficient construction techniques, software adoption and digital construction management.

Jesse also holds the office record for the coldest day commuting on a bike to work.

Jesse is a LEED accredited professional, who has focused for a number of years on crafting buildings that bring beauty to people's lives, while living lightly on the earth. Our mission at Kaplan Thompson Architects is to help create a bright green future for all of us.

RELEVANT PROJECTS AND REFERENCES

Project: BrightBuilt Barn Prototype (certified LEED Platinum)

Location: Rockport, ME

Super green prefabricated net zero prototype

Reference: Dr. Keith Collins, Client, 207-593-6392, keithcollinsmd@yahoo.com

Collaborators: Bensonwood, Petersen Engineering

Metro Green (certified LEED Platinum)

Arlington, VA

description here

Patricia Shields, Client, (571) 334-7215, pattyshields@gmail.com

Collaborators: Fore Solutions

Project: Greater Portland Habitat for Humanity Build It Big (B.I.G.)

Location: Portland, ME

Community-based collaborative demonstration project of affordable green home.

Reference: Steve Bolton, Portland Habitat for Humanity (207) 772-2151, steve@habitatme.org

Collaborators: Fore Solutions

Project: Modular Zero Homes/Peaks Island Home Start

Location: Peaks Island, ME

Modular, affordable net-zero homes in a collaboration with Keiser Homes

Reference: Mary Kelly, Island Institute (207) 781-6551

Reference: William Floyd, Genesis Fund, bill@genesisfund.org

BRIGHTBUILT BARN

BRIGHTBUILT BARN
ROCKPORT, ME
PROTOTYPE FOR A
SUPER GREEN,
OFFSITE FABRICATED,
NET-ZERO BUILDING
LEED PLATINUM
COMPLETED: SEPTEMBER 2008



At its core, the BrightBuilt Barn is an educational building. While the building has a small program – to serve as a studio or two-bedroom home – it has large intentions; its mission is to demonstrate an alternative method of building that allows a level of flexibility and sustainability beyond the reach of typical residential construction. This point was underscored in comments from the recent 2009 LEED for Homes Innovation Award given to the BrightBuilt Barn by the U.S. Green Building Council, “BrightBuilt Barn is a true example of outstanding leadership in sustainable construction that sets a great example for builders and project teams throughout the country.”

An original goal of the project was to influence and inspire subsequent projects that would build on the advances made in developing this building. While built to house private individuals, the BrightBuilt Barn has been open and accessible to the public since early on in the design process. Since completion, hundreds of people have visited the building. Thousands more have read about it and tracked progress on the website.

From conception to construction, five guiding principles have been integrated into the BrightBuilt Barn project.

Livability: Does the solution fit the need?

Sustainability: Is this building environmentally responsible?

Replicability: Can we build this building again?

Disentanglement: Can this building change over time?

Education: Can this building be a teacher?

With these overarching principles and questions in mind, we created a building with the following sustainable features:

Super Insulation/No furnace: The entire building envelope is insulated to R-40, which, in combination with high efficiency windows and doors and extreme air-tightness, creates a building so efficiently engineered and constructed, it does not require a furnace.

Net Zero Plus: The building generates more electrical and heat energy that it uses, serving as an “outboard motor,” supplying excess energy for the larger home on the property.

Solar Thermal and PV: A 5 kW solar PV array provides all electricity for the building and a 60-tube solar hot water system provides domestic hot water as well as heating needs.

Pre-Fab: The majority of the project was pre-fabricated at Bensonwood’s New Hampshire workshop, greatly eliminating waste in the construction process by allowing for computer-assisted fabrication under controlled conditions and allowing for efficient re-use of any material waste.

Sustainable Landscape: Site disturbance was kept to a minimum by a carefully orchestrated 3-day installation of the prefabricated structure. All plantings are native and drought tolerant.

Flexibility/Disentanglement: Inspired by Bensonwood’s OpenBuilt™ System, systems are kept separate, in accessible locations such as chases, raceways, and conduits. This strategy increases the structure’s adaptability, and thus its usefulness over time, minimizing the need for any major remodels, especially as technologies change.

Recognition for Sustainability: Energy Star Certified, LEED Platinum, documented Net-Zero, participant in Cascadia Living Building Challenge, HERS index of 23.

As part of the project’s extensive web presence, live data of the building’s performance is tracked on the project website. A quick glance at the home page shows up to the moment energy production and consumption in kWh, thereby creating transparency and accountability for the claim to be net-zero. Additionally, an LED light skirt rings the building base, with a corresponding fixture inside, and glows green when energy production is positive and red when consumption is greater than production.

The BrightBuilt Barn is now a product for sale through Bensonwood – as a deep-green, pre-fabricated, adaptable structure that can be reconfigured internally to serve changing needs. The product can be delivered anywhere in the country and erected on site in 3 days at a cost equivalent to the current average square foot cost of a typical home. An interactive pricing spreadsheet on the website allows buyers to craft the right combination of features and finishes that fit their need/budget.

The design process was collaborative throughout. It began with a one-day charrette in Portland, ME, attended by all of the core team members. For one day we sat together and developed relationships - we talked, drew, diagrammed, proposed, questioned and dreamed. Subsequent “mini-charrettes” took place among smaller groupings of the team as needed. Weekly conference calls between the owner and architects provided clear updates of project status and an opportunity to discuss any timely issues/decisions.

The process also took great advantage of all of the internet-based tools available to teams working from multiple locations. BaseCamp served as a project extranet, hosting e-mail conversations among team members and serving as a central location for documentation throughout the process. The team also used Adobe Connect to look at the drawings and construction models during remote meetings.

A wiki served as a repository for early documentation of the process and links to other inspiring project and ideas. A blog, maintained by the architects and client, provided weekly updates on progress as well as commentary and observations on larger climate change/green building issues. A website (www.brightbuiltbarn.com) now serves as a concise source of information about the project, the process, and the product. The design process did not end with the completion of the project. Team members still communicate regularly to discuss post-occupancy performance and the client is currently re-convening the team to explore a second project based on the same principles.

Reference:

Dr. Keith Collins
 (207)593-6392
 keithcollinsmd@yahoo.com

